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EDUCATION

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HEALTH AND PHYSICAL EDUCATION NUMBER

Health Education and the Classroom Teacher
Leisure—Then What?
Physical Fitness Benefits: A Summary of Research
Changing Growth Patterns of The American Child
What You Should Know About Sight

SPECIAL ARTICLES

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Can the Schools Help Industry With Communications?
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Program for the Superior Student
Activities of Beginning Teachers
The "Organic" Theory of the Teaching of Reading

SPECIAL FEATURES

What the Schools Are Doing
Franklin Watts
Letter to the Editor

A MAGAZINE DEVOTED *to the* SCIENCE, ART, PHILOSOPHY *and* LITERATURE *of* EDUCATION

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CARL C. WILLGOOSE, *Guest Editor*
Oswego, New York
State University of New York

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EDUCATION

VOL. 78 APRIL, 1958 NO. 8

Health Education *and the* Classroom Teacher

By CARL E. WILLGOOSE
State University of New York
Oswego, New York

"While health itself is not the finest flower of life—it is the soil from which the finest flowers grow."
—Duncan Spaeth

HEALTH EDUCATION includes every educational influence that helps to improve the health of the school child. It is a process of changing health behavior in such a way that boys and girls will not only be able to learn better, but will have the necessary wherewithal to live a rich and full life.

There is no person in the school system better fitted to make a significant contribution to the health of school children than the classroom teacher in the elementary school. She alone occupies the key position for improving child health. With her interest, enthusiasm, and understanding the school health program moves ahead. Without her support, however, the health education program never really gets started.

The Role of the Classroom Teacher

The role of the classroom teacher is unique; no other person sees the child as she does. She can readily compare his appearance and actions today with what they were yesterday or a month ago. Or she can compare him to the other thirty children in the classroom who are about the same age. This provides the alert teacher with a vantage point that neither the parents or family physician can match. Thus, every classroom teacher holds a potentially powerful job for building sound health. The extent to which she does this will depend upon many things. She will need a warm personality and feeling for children, and she will need to use her powers of observation carefully.

How the Classroom Teacher Promotes Health

Specifically, the classroom teacher promotes health as follows:

1. *By co-operating with the school health service personnel.* Children are properly prepared for a visit to the school physician or nurse for periodic physical examinations. Teachers take a positive approach to the examinations by saying to their pupils, "The doctor is coming to see how many

healthy boys and girls we have." Teachers help in the screening of children for defective vision and hearing. Learning to visit medical personnel and come away happy is an education in itself. Any experience that is satisfying or "feels good" to the child is effective in terms of his future behavior. The nurse, the doctor, and the dental hygienist should be their friends.

2. *By detecting health abnormalities and referring them to proper authorities for appropriate follow-up and correction.* The teacher who uses her "eyes to see" can observe a variety of items related to the onset of poor health. The child with frequent colds and sore throats who is continually snuffing in class may have any one of a number of difficulties involving the upper respiratory area. Likewise, the child that squints his eyes to see or turns his head to hear simple questions may be in need of medical aid right away. The child who often exhibits signs of emotional upset may be missed entirely by the parents, but spotted by the teacher as one who behaves differently than the group and needs individual attention. It should be remembered that the younger a person, the easier they respond to a distracting stimulus. Where an adult can in effect say to a stomach ache or pain, "get thee behind me," the small child simply cannot ignore it. His ability to learn, therefore, is directly impaired. The same thing is true with the child who scores well on a test of learning aptitude, yet produces work in class that is hardly better than average. He is the kind of pupil that bears watching.
3. *By making the school environment pleasant and desirable for the pupils.* The school, to be at all effective, must be the kind of place a child wants to go to. The classroom is made comfortable by the teacher. She regulates such physical items as temperature, ventilation, lighting, and seating. Her own attitude toward the students has much to do with the health and happiness of the class. There are numerous children who dislike school and show this by coming down with "morning sickness"—a disease that fails to appear on Saturdays, Sundays and holidays.
4. *By providing health instruction in the classroom.* Teaching is done both informally and formally. The teacher seldom misses an opportunity to refer to the child's health and welfare. Health as a topic is also correlated with other materials. It is taught with the aim of changing habits and attitudes. Health knowledge as such must lead to the kind of understanding that results in changed behavior.

Following Up Deviations from Normal Health

There are great numbers of children who come from homes in this country who do not have adequate preparation for school. They lack the sleep, food, or emotional climate that makes for satisfactory school work. Poverty, ignorance and parental indifference are behind this. In the classroom the child

falls short of what is expected of him. He may appear listless or lazy, easily discouraged, and show low scholarship. The alert teacher may be able to notice his dry hair and scalp, sallow skin, poor posture, lack of energy in physical activities, restlessness, and general irritability. It is important that something be done quickly. This situation is no different than one where a child is in need of glasses because he cannot see the blackboard. Expert medical judgement is needed. Follow-up to see that something is done is vital. Here, parents and teachers co-operate, but it is the teacher who is in a position of *control.* She actually controls the situation from the classroom where she has a day by day check on the pupil concerned. Nevertheless, pupils still appear year after year with the same defects or difficulties despite the efforts of school personnel.

The following case report from a teacher in Florida represents a practical approach to a problem of malnutrition. It is more difficult than most cases, but is the type of case that is present in almost every community. It clearly demonstrates the role of the classroom teacher as a *prime mover* in following up basic health abnormalities. The classroom teacher speaks:

> Melvin was ten and a half years old and in my third grade. There were three younger children in his family. He repeated the second grade where he was considered to be a slow student. He was thin and small for his age and showed other signs which made me suspect that he was malnourished. He was very pale and his skin had a sallow look; his hair was dry, stringy and dull looking; he had dark circles under his eyes; and had a pinched look on his face.
>
> Melvin came to school all year barefooted and his skin was so dirty it looked rusty in spots. He looked as if no one had ever seen that he had a bath. He was absent from school quite often. Sometimes his excuse was that he had a cold or didn't feel good or that he had to stay home and look after his baby brothers. Often he complained of being tired or sleepy.
>
> I talked to Mrs. Irwin, our school nurse, and she told me to bring him around so that she could see him. She examined the mucous membranes of his eyes. She looked at his teeth and found several small cavities. She talked to him for some time and found that quite often he came to school without breakfast. His mother's health was bad and he would get up too late to fix breakfast for himself and his other little brother who was in the second grade. He said he never drank milk at home because it was needed for the babies.
>
> Mrs. Irvin had both the boys checked for hookworm and when that came back negative she decided to visit Melvin's home. From this visit she found out that Melvin's father made fair wages but was a heavy drinker and often used the grocery money for buying whiskey, leaving barely enough for food. She said that many times Melvin sat up rather late at night to keep his mother company when the father was out. Mrs. Irvin impressed upon the mother how important it was for the children to get the proper amount of rest. The mother needed medical attention but could not afford it so Mrs. Irvin made an appointment for her and the children to see the county health physician. She consulted the Welfare Department regarding the family situation.
>
> After her visit we talked to the school principal and the lunch room supervisor. We made arrangements for Melvin and his brother to have milk each morning when they arrived at school. The children had been going home for lunch so we arranged for them to be put on free lunches.
>
> Within two months time Melvin improved considerably, both in his

contacts with fellow pupils and in his scholastic achievement. He was simply a different boy.

Parents and Teachers

The average schoolteacher and the average parent have little difficulty getting together to discuss the status of the child—the welfare of which is their mutual concern. There are cases, however, where the child suffers because the teacher is unobserving or is "too busy" to consider the pupil individually and follow up suspected weaknesses. There are also many occasions when the parent fails to do his share of co-operating. For one thing, children sometimes never seem as much in need of attention to the parent as they do to the school authorities. All too often the child in need of eyeglasses doesn't get them right away because the father or mother knows he can see. It is obvious to them that he can see because he doesn't walk into the side of the barn. In most communities parents understand quite well the purposes of the school. Others are indifferent. To illustrate this point the story is told of the school nurse who called at the farm home of the mother of Mary to tell her about the girl's long standing case of head lice. After the nurse took some time to explain the girl's situation, the mother simply shrugged her shoulders, looked out across the cornfield, and said, "Well, everybody has a few."

The classroom teacher's effectiveness with parents can be greater during the primary grade years than at any other time. This is the period when parents willingly visit the schools and lean heavily on the teacher for all kinds of information regarding their offspring. It is also the time when children listen and believe about everything the teachers say. With parental help and encouragement, therefore, most children will profit considerably from the health instruction given at school. In a dental health unit, for example, the parents can be most helpful. Children who are keeping a record at home of their toothbrushing habits can be encouraged, not only in terms of brushing them, but using an effective method. In one community the parents got together and supplied the teacher with toothpaste and brushes so that the children, under the teacher's supervision, could brush their teeth following the mid-day lunch. This is the kind of health education that does more than impart knowledge. It satisfies immediate and long term needs of boys and girls because the parents and teachers are working togther.

Health Teaching

Health is successfully taught on an informal basis in the primary grades. Instruction becomes a little more formal on the intermediate level. Such an informal basis for teaching permits the teacher to engage the class in a wide variety of activities, both in the school and the community. Health and safety instruction can be quite "down to earth." Learning experiences, in which various instructional methods are used, are commonplace today. Teachers employ audio-visual aids, library materials, panel discussions, etc. to motivate children. In some areas students work on their own health and safety committees. They take field trips into the community. They put on school health assembly programs, provide health news for student publications, carry on community health surveys, etc. In one Georgia community the elementary school sixth grades studied mosquito control, formed

classroom committees, and began in a small way to spread oil on stagnant waters. Their project caught the interest of the townsfolk and other organizations in the community joined in the effort to control mosquitoes. The whole thing was immensely successful and the amount of first rate learning that occurred was impressive.

Other student activities of a practical nature that have proved to be commendable health education activities are as follows:

—Radio and television broadcasts of health programs prepared and presented by pupils over the local radio or television station.

—Participation in community clean-up campaigns as a part of health instruction program.

—Upper graders conducting a survey of the number and kind of eating places in the community.

—Pupils assisting teachers in classroom duties, such as control of lighting, heating and ventilation in the room.

—Students assuming responsibility for the selection of their own chairs and desks.

—Class members taking part in the planning of school lunches and the operation of the school lunch room.

—Pupils having the opportunity to practice safety procedures with respect to fire drills, and passing to and from classes.

It may be seen from what has been written that health education is broad in its scope, and includes health services, healthful school environment and health instruction. Yet, without the enthusiastic help of the classroom teacher, only a limited effort can be made to improve the health of boys and girls.

BOOK REVIEWS

HANDBOOK OF MENTAL HEALTH FOR TEACHERS. By Elizabeth M. Korte. Hollywood, California. Pan Press. 1957. $2.95.

This little paper-bound handbook is divided into three sections: (1) an exposition showing teachers how they must critically analyze the problems which confront them; (2) suggestions for teachers concerning the handling of pre-adolescents, adolescents, homework, reporting to parents, the handicapped child, the gifted child, problems concerning grouping and drop-outs, a guidance plan showing vocational needs, and an illustration of classroom activities prepared by pupils of a fourth and a sixth grade. The third part contains evaluation scales for teachers, for parents, for pupils, and for pupils evaluations of subjects and teachers.

—S. M. Amatora

THE SCHOOLING OF CHILDREN WITH IMPAIRED HEARING. By Beatrice Le Gay Brereton. Sydney, Australia, Commonwealth Office of Education. 1957.

This paper-covered volume reports an investigation of a large group of children suffering from varying degrees of deafness, from 1947 to 1955. Divided into five sections, the report covers: (1) the scope and design of the study; (2) learning to use and understand language; (3) language problems in relation to school activities; (4) children's own abilities and limitations as causes of success and failure; (5) the effect of school environment.—S. M. Amatora

Leisure—Then What?

By JAY B. NASH

Executive Secretary for New York State Association for Health, Physical Education and Recreation

THE AGE-OLD DREAM of man has been for leisure—a chance to let down, to do something he has always wanted to do. He has dreamed of a haven where the winds and waves no longer will beat on his frail craft. There would be happy days, no work to do, no schedule to meet, no struggle. It would be a time to realize a vague, lifelong ambition, to write, to paint a picture, to take a trip to Rio, even to catch that big fish he has dreamed about.

The dream came true, thanks to the Industrial Revolution and the Automation Age. Man has been handed time on a silver platter, not grudgingly but generously.

From a twelve-hour working day—still too often prevalent on farms—man has a forty hour work week and talking of thirty-two with twelve to fifteen years to live after retirement. Even considering all of the hours of travel to work, along with the survival needs of eating and sleeping, there is left an average of between seven and eight hours a day. What will man do with these?

To use leisure intelligently and profitably is a final test of civilization. No great one has yet developed leisure on a large scale as a social pattern and lived.

The machine liberates. True. But for what? This is the question that thoughtful people ask, as America, as well as the whole world, is beginning to realize its age-old want—leisure. And a second question: Does real happiness lie in achievement and the anticipation of adventure or in rest and security?

Leisure has never been considered quite respectable. It was not part of the theory of getting ahead in the world which usually meant making money. Many who preach the new philosophy of leisure have a slight feeling of guilt if a matinee is attended before a full day's work is done. The evening theatre represents a much more respectable pattern.

The reason for this lack of leisure-time philosophy is understandable. The Pilgrim Fathers were forced to adapt themselves to the rigorous demands of pioneer living. The business of making a living came first. "Man must conduct his business with a high seriousness." Seriousness was of itself a kind of religion. Whatever may have been the sources of this philosophy, it developed a worship of industry and with it a decided distrust of recreation which was thought of as a waste of time.

Primitive people recognized that youth must be inducted into the group in order to get a sense of belonging. They recognized that this must be an emotionalized process, utilizing ceremony, song, magic spells, purification of "body and soul," and all other devious ways of tapping the imagination. The stage settings were dramatic, the dancing flames of immense campfires

with all the mystery and magic of darkness and shadows, heightened by the rhythmic chants of hundreds of singers.

By these means, flood tides of emotions were loosened. It was a time of decision, purging the individual of all selfish motives and, at the same time, a consecration of self to ideals. These were teachable moments when life decisions were made, when halting, halfhearted good decisions became set in dramatic behavior patterns.

Belonging is no less a need for adults and a paramount necessity for those in the older age brackets. To belong is to be needed, wanted, respected and loved. In most ancient societies, the older person is the "wise one." He has a place and age means dignity and the "best is yet to be."

No man can grow to cultural stature without belonging, without doing something significant for, and in the group. Aristotle thought of the good men as the good workmen; workmanship thought of in the craft sense as well as the literary and social senses. Man's feet are in the slough of despond, his head is bent low before the mirror of his companions until he has achieved—until men look up to him and say, "He is a master." The area of achievement is so broad that every man, woman and child can acquire spiritual life from accomplishment and service.

Life is a going-on process; like a top, when the spinning stops, life stops. We cannot escape the risks and opportunities of living. Life activity never stops. It never stops in anyone. And there is an art of living which, in many times and lands, has guided or built this essential activity into beauty, into power, into habitual experiences and collective achievements which appear superhuman and miraculous.

Recently a Cree Indian was asked to compare the ease of the present-day reservation with the life of his ancestors. He sighed wistfully, "I live 150 years too late—for my ancestors there was glory."

Recreation must be thought of as satisfying a human need—a desire to create—to master—to have the feeling "I made it" or "I did it." Thus only can man attain normality and be a needed member of his group.

Recreation must be thought of as something distinct from amusement, at least a great deal of entertainment and much of what has been called leisure time. Recreation must now be defined: When work because of its mechanization and routinization—with its accompanying drudgeries ceases to give men an outlet of creativity, recreation is the name we give to those activities which provide him with a spiritual outlet of creativity and mastery.

This limits recreation in its highest form to some form of creativity. Shakespeare was creative; so is the individual who interprets a character in Shakespeare. So is an individual who witnesses a great interpretation and says "I wish I could have said that," or "I wish I could have done that."

Education has a responsibility, which will be a growing one, to educate for living. It will not be confined to any one area such as sports and games but will include activites in the areas of science, poetry, literature, music, the dance and all the areas of the arts. In fact, every phase of the educational program has recreational opportunities and who can tell when these avocational areas may become vocational as has happened in many cases with the artists, the scientists and the athletes. Education for

leisure therefore becomes a must in at least four age categories:

1. The activity of children where recreation will be recognized in the form of play. Play, experimenting in various areas, is nature's way of guaranteeing the child gets many phases of education. The long years of childhood experimentation lays the basis for a wide range of thinking as it did in the early history of the race.

2. The education of youth. While a justification of a wholesome recreation is not wholly the prevention of juvenile delinquency, essentially this is exactly what it is. Survey after survey has shown that the delinquent boy is one without a number of scintillating, driving interests. One report indicates they became the empty ones, the disinherited, with no ties to any constructive group or activity, with no standards or goals, with little hope, covering their discouragement and despair with bravado or happy-go-lucky clownishness. They feel wanted by no one, they know no one whom they can call friend in the true sense of the word. They are "Adolescents Adrift"—no rudder, compass, no motive power, no beckoning harbor."

3. The productive years. The results of tension, worry, fears and stress indicate the need for stirring, relaxing hobbies for the man and woman in the busy years of life. These activities where the individual throws himself enthusiastically into a program represents the only way to wholesomely relax.

The businessman drives himself at his office all day, then worries most of the night. The housewife tries to run her home, maintain a social life and participate in community activities—and at bedtime is so jangled that she needs a sleeping pill.

Glands attempt to adjust to the constant demands of stress. They pour out excess hormones to keep the body going. For a while they succeed. But in the end the defense mechanism itself breaks down—*arteries harden, blood pressure rises, heart disease develops, arthritis strikes. These and other diseases* are all part of the stress picture.

Strangely, boredom exhibts many of the characteristics of stress and fatigue. Boredom may arise from monotonous types of work in which the individual is not the slightest bit interested, or it may come from having nothing interesting to do. In boring situations, there is not enough adrenalization, there is no enthusiasm provoking interest, the body is not stepped up to an accomplishment level. The individual really feels tired. As an antidote to this fatigue, one should indulge in not less but more activity. The answer is—get into action—do something in which you are interested—get on your feet in the morning—"get going."

Unless an individual has something for which he must get up, he often times just does not get up, claiming fatigue; but, once up, within a very short time body normality is restored and he is no longer tired. One conclusion, certainly, is that many children who seem tense and jumpy, who have a tendency to be highly emotional or irritable, need more activity—not less. They need more activity of the total-body, rhythmic-type running, jumping and balancing. This is the sensible way to achieve relaxation rather than to turn to anti-worry pills, tranquilizers and drug relaxers.

4. The age of retirement. The key to the solution of normality and growing old with enthusiasm is service. As long as challenges are sufficiently sig-

nificant, where the contribution of everyone is needed to win a game or to complete a community health or recreation project, the problem of real living is solved. Our mental hospitals are filled with unmotivated people.

The deadly poison that hides in the dream cloud of idleness is the age-old principle of the "law of disuse." No matter what social position or income a person has, it is a fact that life has a quick way of disposing of non-workers, loafers and people with no hobby or aim in life. Retirement or compatible financial status should never become a lazy man's dream of doing nothing. Senile dementia is more prevalent among stupid, non-motivated individuals than it is among busy people. The brain when not used to its utmost will atrophy. There are years of "borrowed time" ahead for the busy man. With more and more people in the older age brackets, any nation will be handicapped unless some way can be found to use these people.

Man must have the thrill of mastery, the "traveling hopefully" concept. There must be another ridge to cross, there must be more bass in the lake—more work for volunteers. These are the thrills that keep people young. Such thrills carry young and old into a myriad of indoor contests and to the playgrounds and forests. They take men to the tropics and the Arctic. Man endures hardships in long travel and in lonely cabins, devoid of modern accommodations and comforts; they fight heat, cold, flies, and poisonous snakes in order to find thrills. Rob man of this heritage and you take from him one of the great urges to live.

This preparation for living is definitely an educational task. It must supplement the work of the home and the community and oftentimes be a substitute for them. At least four reports have been issued within the last year from outstanding impartial agencies indicating that our tool subjects and our offerings in the secondary schools are being taught better than ever before. Our solution is not back to more so-called "fundamentals" but forward to a real education for the "masses of children". James B. Conant, former president of Harvard points the way. He says "To my mind, the way out of the educational quandary lies in identifying talent young and then providing for teachers who will stimulate the selected students to do their utmost because they want to and as a matter of pride."

At all ages we must keep in front of us unfinished tasks, goals to be accomplished, challenges to be met. There must also be another range of hills over the one in sight. If education can help to furnish people with these goals America can set a pattern for the world, the reverse of which it is doing right now.

Unfinished tasks constitute the essence of life. The unfinished business of life, is life itself. When unfinished business ends, life ends. This observation is as true of societies as it is of individuals. We are confused and baffled by the shattered conditions of the society in which we live. Many of the things which we took for granted, had assumed were settled, have returned for reconsideration. The danger is that these new problems will either not be faced frankly or they will be met with cynicism, even bitterness. The danger is that we shall lose hope, or worse, faith.

Physical Fitness Benefits: *A* Summary *of* Research

By H. HARRISON CLARKE
School of Health and Physical Education
University of Oregon, Eugene, Oregon

PHYSICAL FITNESS may be considered as a positive quality, extending on a scale from death to abundant life. All living individuals have some degree of physical fitness; and this degree may be interpreted in terms of their capacity for performance and their endurance in physical activities. Thus, physical fitness is a qualitative element, with many variations among individuals and even within the same person at different times and at different periods of life.

The physician traditionally and properly is concerned primarily with deficiencies likely to impair organic function and to cause death; and medical practitioners rightly devote themselves largely to protecting the organism from disease and to prolonging life. The physical educator, on the other hand, generally accepts the individual free from organic drains and handicapping defects and, through proper activities, develops a body that is physically strong and capable of prolonged effort. The physically fit person, consequently, should be able to carry out the essentials of his job without undue fatigue and should still have an ample reserve of energy to meet life's unforseen emergencies and to enjoy leisure time.

In our "push-button" society, people frequently question the need for much physical fitness, as doing one's job requires only a minimum of physical strength and endurance. The purpose of this article is to summarize a number of studies in order to present evidence of the benefits of this element in daily lives.

The Physical in Physical Education

Little doubt exists today that the right kind and amount of exercise will develop muscular strength, body flexibility, and circulatory-respiratory endurance. In fact, properly directed exercise is the only known means for acquiring the ability to engage in tasks demanding sustained physical effort. However, it is gratifying to demonstrate the presence of such benefits as a consequence of existing physical education programs.

In a study by Whittle (28), two groups of 81 twelve-year-old boys were contrasted in a number of physical traits. One group of these boys had participated for at least three years in good physical education programs; the other group had little or no physical education in elementary school. The boys in the two groups were comparable in such maturity factors as chonological age, skeletal age (hand-wrist X-rays), weight, height, and developmental level (Wetzel). However, in terms of various affective factors, the two groups had pronounced differences. The means on

the Rogers Physical Fitness Index (PFI) test* for the boys in the good and poor physical education programs were 121 and 103 respectively. The boys in the good programs also produced higher means on the Metheny-Johnson Test of Motor "Educability," the Indiana Physical Fitness Test, and the vertical jump.

A further interesting disclosure of the Whittle study was that boys in each group who participated a "lot" in out-of-class physical activity showed strong superiority over those who participated a "little." Again, in terms of the PFI test, a very high mean of 132 was scored by those participating a lot in outside activities, while the mean for those engaging a little was 109. Of special import for those interested in the development of strong athletic teams is the comparison between the boys from both programs who participated a lot in out-of-class activities. The PFI means were 132 and 116 for the boys from the good and poor programs respectively. Comparable results were obtained for other physical tests included in the study.

Utilizing PFI tests, Clarke (5) reported that male students entering the University of Oregon with four years of high school physical education had a higher average than did those entering with two years or less. In another report, Clarke (4) presented the results of the Oregon Pilot Physical Fitness Project, in which 100 boys and 100 girls in each of eleven high schools were tested with the PFI test before and after a three-months physical fitness program. The median PFI for all boys increased 10 points, from 98 to 108; the median PFI increase for all girls was 13 points, from 93 to 106. A number of other schools elsewhere have reported similar results.

Shaffer (23) reduced failures on the Kraus-Weber (K-W) Test of Minimum Muscular Fitness to a marked degree in a few weeks through body mechanics and vigorous conditioning exercises. Forty-two per cent of 2,281 junior high school boys and girls in Johnstown, Penn., failed one or more of the six K-W test items in September 1955; in November, the failures dropped to 8 per cent. At the end of the term, only 4 per cent failed one or more of the test items, although conditioning exercises *per se* were rarely done by the pupils after the first week of November. Grogan (9) obtained only a 11.8 per cent failure of K-W test items among 1,389 pupils tested in the Roxborough Junior-Senior High School, Philadelphia, Penn. He attributes this low failure rate to the vigorous nature of the physical education program in his school for the past twenty-five years.

Organic Soundness

Kraus and associates (12) state: "Study, treatment and prevention of physical inactivity as an important etiological factor of many disabling diseases is imperative for our national welfare." In *Hypokenetic Disease,* such information as the following was presented as gleaned from many sources: coronary heart disease is twice as frequent in the sedentary as in the active; other diseases more frequent in the sedentary than in the active are diabetes, duodenal ulcer, and other inter-

*The Physical Fitness Index is obtained by dividing the obtained Strength Index by a norm based upon sex, age, and weight. The Strength Index is the sum of the following tests: arm strength from push-ups and pull-ups, back and leg lift strengths, right and left grip strengths, and lung capacity. A PFI of 100 is the median for the test; and scores of 85 and 115 reflect the first and third quartiles respectively.

nal and surgical conditions; 80 per cent of low back pain is due to lack of adequate physical activity; lack of physical fitness goes parallel with emotional difficulties; the physically active show better adaptability to stress, less neuromuscular tension, and lesser fatigability; and active individuals age later, do not tend to absolute and relative overweight, have lower blood pressure, are stronger and more flexible, and have greater breathing capacity, and lower pulse rate.

Morris and Raffle (15) studied the incidence of coronary heart disease among 25,000 drivers and conductors, aged 35 to 64 years, of the red busses, trams, and trolleybusses of the London, England, Transport Executive. Nearly all the conductors' work was on double-decker vehicles, which required considerable physical activity as contrasted with the drivers' relative physical inactivity. The standard mortality rate per 1,000 from coronary heart attack was at least twice as high for the sedentary drivers at three days, three months, and three years from the onset of the first clinical episode. As a consequence of these and other observations, the authors advanced the following hypothesis: "That men in physically active jobs have a lower incidence of coronary heart disease in middle age than men in physically inactive jobs. Most important, the disease is not so severe in physically active workers, tending to present first in them an angina pectoris and other relatively benign forms, and to have a smaller case fatality and a lower early mortality rate."

Luongo (14) studied the health habits of adults who had suffered heart attacks. The evidence showed that sedentary living and poor health habits were the real culprits and not hard work, overexercise, or occupational stress. The author contended that proper health habits, including nutrition and exercise, should be carried on into middle and old age. Dr. Paul Dudley White prescribed exercise for President Eisenhower following his heart attack (7); and has written: "Proper exercise is as essential to good health as eating and sleeping." (27)

Zankel and others (30) studied the Physical Fitness Indices of diabetic patients in the Crile Veterans Administration Hospital, Cleveland, Ohio. The median PFI score was 53. After an average 33-day period of treatment, the median improvement was 20 per cent. In another study (29), 19 additional diabetic patients were treated for 9 to 60 days. Nine of these patients received regular supervised exercise and ten did not. The patients receiving exercise showed an average PFI increase of 12, or 29 per cent; the patients not receiving exercise showed an average PFI decrease of 2, of — 3.7 per cent. Thus, proper diet and insulin care alone was not adequate to improve the level of strength of diabetic patients; an increase in strength occurred only when exercise was included in the treatment regime.

Gallagher (8) has stressed the value of athletics and other physical activities in the adolescent's development and the frequency with which strengthening activity rather than rest is the appropriate recommendation when the person is below par in health. For medical practice, he states: "The evaluation of strength, the determination of the disproportion between strength and probable stress, and the increase of strength through exercise can at times constitute better management than a regime which focuses upon the ailment, emphasizes

rest, and ignore the facts regarding strength development in exercise." During World War II in the hospitals and convalescent centers of the Army, Navy, and Air Force and since the war in Veterans Administration and other hospitals, exercise was and is being used extensively in speeding the recovery of patients. Exercise has become an essential adjunct of rehabilitation, "the third phase of medicine." (22)

Mental Alertness

A number of researches support the contention that physical fitness is related to mental achievements. The great phychologist, L. M. Terman, concluded after twenty-five years of studying intellectually gifted children that: "The results of the physical measurements and the medical examinations provide a striking contrast to the popular stereotype of the child prodigy, so commonly predicted as a pathetic creature, overserious, undersized, sickly, hollow-chested, nervously tense, and bespectacled. There are gifted children who bear some resemblance to this stereotype, but the truth is that almost every element in the picture, except the last, is less characteristic of the gifted child than of the mentally average." (25) In Terman's initial monumental study, when his gifted subjects were young, symptoms of general weakness were reported by the school nearly 30 per cent less frequently for the gifted than for the control group. (24)

In a current study, Jarman (10) investigated the academic achievement of boys at ages, nine, twelve, and fifteen years, who had high and low scores on the following physical tests: Strength Index, Physical Fitness Index, McCloy's Arm Strength Score, and McCloy's Classification Index. For each age and for each test, the high and low groups were equated by Intelligence Quotients, with the means and standard deviations being comparable each time. Quite generally, the boys with the high scores on the various physical tests had significantly superior grade-point averages in their class work and significantly higher means on standard scholastic achievement tests. Earlier, Rogers (21) studied two groups of college students with nearly equal I.Q. averages, but differing in average muscular strength. The scholarship of the high strength group (I.Q.$=$107) was considerably superior to the low strength group (I.Q.$=$111).

During the academic year 1939-40, Page (16) found that 83 per cent of the freshman male students dismissed from Syracuse University because of low grades had Physical Fitness Indices below 100; 39 per cent had PFI's below 85. These same students had scholastic aptitude scores well above the average; their median was at the 72nd percentile. Coefield and McCollum at the University of Oregon (3) found that the 78 male freshmen with lowest PFI's during the 1954 fall term were definitely low in scholastic accomplishment, as compared with all men at the university. Yet, these same low fitness students were superior in scholastic aptitude.

In the 1941 annual report for the Brookline, Mass., public schools (18), the average PFI for the 126 boys whose names appeared on the high school scholarship role was 117. Studies in Manchester, England, (2) revealed that only 2.4 per cent of students with good scholarship were below the average in physique, as evidenced by body measurements, but that 39.7 per cent with poor scholarship were below the average.

As a consequence of this type of evidence and as a result of many years of observing low fitness individuals, Rogers (2) contended that physically unfit boys and girls at all levels of intelligence have greater difficulty in maintaining mental effort and alertness. He explains the phenomenon this way: "The dependence of learning upon muscular strength is better conprehended when it is recalled that the brain (and mind) do not easily tire: *what tires is the body*. Thus, the bloodstream, clogged with waste products of muscular activity consequent upon all waking life, whether primarily physical or mental, interferes with *synaptic changes*." (21) Rogers then proposed the following Law of General Learning Potential (GLP): The potential of learning anything depends upon both intelligence and physical fitness, generally in the relationship expressed by the formula, $GLP = if^2$ The I.Q. was proposed as the measure of intelligence (i) and the PFI as the measure of fitness (f).

This Law is interpreted to mean that a person's general learning *potential* for a *given level of intelligence* is increased or decreased in accordance with his degree of physical fitness. The individual when fit is more prone to be physically and mentally alert, to be vigorous in his applications, and to suffer less from efficiency-destroying fatigue than when he is unfit. While one may disagree with the formula proposed by Rogers and with the tests he advocates for use with it, certainly the basic concept of the law is tenable.

Social Adjustment

Physically unfit boys and girls experience difficulty in day by day personal adjustments with others and in developing good social habits and attitudes. From the Berkeley Growth Studies, Jones (11) reported: Boys high in strength tend to have good physiques, to be physically fit, and to enjoy favored social status in adolescence. Boys who are low in strength show a tendency toward asthenic physiques, poor health, social difficulties and lack of status, feelings of inferiority, and personal maladjustment in other ways. Studies by Kuhlen and Lee (13) and Tryon (26) disclosed that the seventh-grade boy who lacks skill and has a distaste for organized games is frequently ridiculed and often shunned by his age group; at the twelfth grade, outstanding athletic skill can maintain the prestige of a boy even though he has few other assets.

Studies conducted at the United States Military Academy by Appleon (1) indicate that physical proficiency measures are useful predictors of non-academic aspects of military success, particularly at the lower range of motor fitness. The statistics show that of every ten applicants in the bottom 10 per cent on Academy fitness tests, nine make below average cadets.

In a current study, Popp (17) administered the PFI test to approximately 100 sophomore boys at Marshfield High School, Coos Bay, Oregon. The 20 boys with the highest PFI's (102-135) and the 20 boys with the lowest PFI's (56-79) were chosen for contrast through case studies. As one phase of this study, the 40 boys thus selected were arranged in a single alphabetical list. Five judges (principal, vice-principal, dean of boys, and two physical educators) each independently selected the ten most desirable boys (those most nearly like sons they would like to have) and the ten most undesirable boys (those least like sons they would like to have). Sixteen boys were named by at least one judge

in the "desirable" classification. of these, 11, or 69 per cent, had high PFI's; and five, or 31 per cent, had low PFI's. In selecting the "undesirable" boys, again 16 boys were chosen. Of this group, four, or 25 per cent, had high PFI's and 12, or 75 per cent, had low PFI's. Thus, the five judges, without knowledge of each boy's PFI, generally recognized in the boys with high scores on this test the many and varied traits they would like most to see in a son of their own.

In a paper before the International Symposium of the Medicine and Physiology of Sports and Athletics at Helsinki, Finland, Cureton (6) presented evidence to show that personality itself is responsive to physical training in view of the changes that can be made in the autonomic nervous system and in the cardiovascular state. He concluded that men are more energetic, more buoyant and optimistic, more action-minded, more playful, more aggressive—in general they appear more extroverted and more healthful when they are trained than when they are untrained. And, as men go through progressive training, they tend to tackle harder and harder tasks; and they state that they can work relatively harder and longer.

Conclusion

In this presentation, an effort has been made to relate exercise to physical fitness and to relate physical fitness in turn to the organic, mental, and social attributes of the individual. In so doing, personal opinion has been submerged and the case for physical fitness rested upon such objective evidence as exists.

It is not intended to present physical fitness as a panacea, as, obviously, there are many other important factors contributing to our various performances. Perhaps it may be argued that, *other things being equal,* we will be more effective as a consequence of an adequate level of fitness. We should have the strength and stamina to carry on the duties of the day without undue fatigue and with an ample reserve to enjoy leisure and to meet unusual situtions and emergencies; we should realize in an adequate measure our capacity for physical activity as well as for mental accomplishments unhampered by efficiency-destroying fatigue.

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Changing Growth Patterns *of the* American Child

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ACCUMULATED Documentary evidence suggests that the rate of physical and mental maturation of the American Youth has been accelerated. Children of today are taller, heavier, healthier, possess greater mental capabilities and demonstrate advanced physical skills which in many instances surpass the best achievements of older age groups of previous years.

The evidence of earlier maturity is of great import to Education. Our American system has frequently been criticized because of the "lock-step" pattern by which children must advance from grade to grade at the same pace regardless of ability. Based upon the present developmental acceleration it appears that our children may be moving forward not only in "lock-step" but also in the wrong "platoon" since for the same chronological age, children today are biologically older than in previous years.

Today's Children Are Taller, Heavier, More Mature

For the past few years extensive research has been conducted on boys participating in Lttle League Baseball. The size, skill and maturity of the boys playing on tournament teams was particlarly impressive. These young players, although only 11 and 12 years of age, were as tall and as heavy as the average 14 and 15 years old of today and as tall and as heavy as the average 16 and 17 year old of twenty-five years ago. The majority of these pre-teenagers, as established by Crampton's pubic-hair index, (4) were physiologically 15 years old, hence adolescent and not pre-adolescent as their chronical age would indicate. (6)

It has been found that children who excell in sports are usually one to two years advanced in maturity. (8) However the recent studies on boys in Little League reveal an advance in maturation rate of three or four years.

But what about the average child? Has his growth pattern changed as those who possess athletic prowess? Although research on physiological growth over an extended period of time is not available, anthropometric data show dramatic changes.

Since 1880, a period of only 75 years, the average 14-year-old boy has gained five inches in height and 24 pounds in weight. (2, 11) In weight alone this represents a 25 per cent increase. In the same period, the average 10-year-old girl has gained four inches in height and 14 pounds in weight. In the last 25 years the average 12 year old boy and girl has gained three inches in height and 15 pounds in weight,

(13, 11) and the average 14-year-old boy of today has grown to the size of the 16-year-old.

Numerous reports show that the average height and weight of our entire population has increased. (10, 12) However, the greatest change is to be found in children at the age of pubescence or just preceding pubescence thus indicating an advancement in the rate of maturation.

Earlier Maturation of Sports' Skills

One of the most impressive indications of earlier maturaton of Amercan Youth is the outstanding athletic performances of youthful participants. Unusual achievements are being recorded each year by younger athletes.

In Little League 11 and 12 year old boys have been found to run as fast as average 15 and 16 year old boys. Pitchers in this program throw baseballs as fast as 70 miles an hour which is equivalent to some college pitching and certainly remarkable fast for pre-teenage youngsters when compared to the speed of the professional pitchers in the major leagues most of whom throw fast-balls at speeds of 90 miles an hour.

Also extraordinary and almost incredible is the 100 mile an hour speed at which some players in Little League can swing a bat. Mickey Mantle, celebrated and exceptionally strong center fielder of the New York Yankees and winner of the triple batting crown in 1956, swings his bat at 115 miles an hour which is only 15 miles an hour faster.

In individual sports such as track and field and swimming there is unmistakable evidence that teenagers are fast approaching world record performances and have already surpassed world record achievements of earlier years.

In the 100 yard dash there is but 1/10 of a second difference between the record time run by a high school student and the fastest time this distance has ever been covered by man. In the 220 yard dash the difference between the record performance by a high school student and the World Record is a slight 7/10 of a second. Only 9/10 of a second separates the High School Record and the World Record for the 440 yard run.

The World Record in the high jump was established in 1956 at the Herculean height of 7 ft. 1/2 in., yet this is less than three inches better than the High School Record of 6ft. 9¾ in. This High School Record surpassed every Olympic high jump performance until 1956 when Charles Dumas established the standard of 6 ft. 11 1/4 in. The pole vault also provides an interesting comparison. In 1957 a high-school track star vaulted 15 ft. 1/8 in., a height which, many years ago, most believed could never be achieved by anyone. This teen-age record performance actually exceeds the Olympic Record for this event. The most rigorous and the best test for all-around ability in track and field is the decathalon. To capture the gold medal in this event the champion must demonstrate advanced maturity in skills, physique and physiological processes. In the 1948 Olympics at London the decathalon was won, with a record performance, by a teen-ager, Bob Mathias, who was 17 years of age.

Many will recall or have read about the golden era of athletics in the years just preceding the First World War. This was the period of spectacular Jim Thorpe. Yet, of the 12 World Records in track of Jim Thorpe's era, nine now have been surpassed by teen-age athletes.

Some people will debate that this sensational improvement in track and field performances is the result of better athletic equipment and more favorable conditions of track and field. Such may be true; however, swimming performances reveal a similar trend and certainly water has always been water and recent record times cannot be attributed to any particular modification of the bathing suit.

The 1957 AAU swimming championship in Houston, Texas serves as an excellent example of exceptional achievements by youthful performers. Seventeen year old Carin Coke set a record in the 110 yard backstroke, 17 year old Nancy Raney surpassed the record in the 110 yard butterfly, 15 year old Carolyn Murray set a new standard in the mile freestyle, 15 year old Sylvia Ruuska set two records but most impressive was 13 year Chris Von Saltza who shattered no less than three marks.

It is obvious that the modern record performances are achieved, in most instances by athletes who are much younger than in previous years. Such accomplishments have been made possible because of accelerated maturation.

Academic Ability of Today's Children

Changes in mental capabilities are difficult to identify but there are evidences which strongly suggest that modern students are academically more competent than students of earlier years.

It has been found repeatedly that early physical maturation favors good scholarship and late physical maturation poor scholarship. (1, 3, 5, 7, 14, 15) Since children are maturing physically earlier today it can be concluded that mental maturation has also been accelerated.

Within the past few months a report "They Went To College Early" was released by The Fund For The Advancement of Education which gives illuminating evidences that outstanding junior and senior high school students are capable of completing college academic requirements. (16) Twelve institutions of higher learning throughout the United States in this five-year research program all found that the students selected to attend college at an early age were capable of satisfactory conduct and achievements. In many instances the "Early Admission" students were more successful than their comparison students who had graduated from high school before enrolling in college. Some efforts have been made to remedy this situation but this program has been limited in scope. (9) It is apparent that entire school curriculae should be evaluated in light of present data which indicate an accelerated mental maturation of American Youth.

In Conclusion

Several evidences indicating that the rate of maturation of American children has accelerated have been presented. Although it is not possible to establish the exact cause or causes of this quickened growth pattern the outstanding advances in medicine, our increased knowledge of nutrition and the control of our environment must be considered primary factors. Antibiotics and vaccines have eliminated or lessened many childhood diseases. The diptheria, smallpox, whooping cough, malaria, typhoid fever and scarlet fever that were often part of the histories of their grandfather and great grandfathers are largely unknown to present-day youths. The vitamin-fortified and balanced diets which are now within the financial

means of almost everyone provide for more optimum growth.

Certainly as Education strives to keep students informed of the prodigious technological progress of this modern era, it must not overlook the fact that these great advances may have effected a change in its own product and the country's most valuable resource, the American Child.

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What You Should Know About Sight

PART II

The Sense of Sight

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SEEING IS a complex process and involves more than merely the eyes of an individual. To understand it one must have some knowledge of physics, physiology and psychology.

A. Physical Factors

The physical aspects deal with the viewed object, which sets in motion a whole series of activities, beginning with a form of energy outside of the individual's environment. This energy is light which is either transmitted through or reflected from the object and is projected towards the eyes, where it is received and refracted or bent, then is converted by photo-chemical action into neural or electrical energy. The latter is then conveyed by the optic nerves and optic radiations to the visual centers of the brain. It is in these centers that a perceptual image is aroused and identified. This image is then projected mentally back into outer space whence it came, the observed object is localized in relation to its environment, and its distance from the eyes is estimated.

1. Light

To be seen, identified and judged how far away it is in space, an object must have certain characteristics and must be in the proper environment or surroundings. Energy in the form of visible light is the first prerequisite essential for seeing. The observed object must either be illuminated by natural or artificial light or it may be self-luminous, such as an electric bulb.

When an object is illuminated, its visibility is governed by a number of factors—its reflection and absorption characteristics, which in turn are dependent on its surface texture, smoothness and polish. The smoother the surface the more reflecting ability it has and the easier it is to see the object, within certain limits. If it reflects too much light, it produces glare which in turn interferes with the ability to see the object.

2. Form, Size, and Color

An object possesses form or shape, size, and color. The latter two play important roles in the act of seeing. If the object is too small, it cannot be seen and identified by the normal processes of refraction, for it is too small to reflect a sufficient amount of light. Its image on the retina also subtends too small an angle to be resolved, unless it can be enlarged with a lens or other means capable of increasing its size.

Its color and saturation are important

for two reasons. The darker the hue, the less brightness it has and the less visible it is. Secondly, its visibility is affected by contrast, that is, by its environment. A green object lying on grass is more difficult to see than a green object on white sand.

3. Movement

Whether an object is moving or standing also affects its visibility. There are instances when a moving object is seen best, and, at times, a standing object is seen better than a moving one. For example, a hunter will more readily observe a moving target, such as a scampering rabbit, than one who is standing still. On the other hand, the words on a printed page can be more easily read when the page is stationary than when it is in motion.

The identification of an object depends on the seeing situation. Peripheral or side vision is primitive and is better adapted for observing motion; while central or direct vision is better adapted for discrimination of fine details. In the case of the hunter, the type of perception he needs is gross, more primitive, and therefore it is easier for him to see an object in motion. In attempting to read a fine line of print or to thread a needle, one has to use the central or more direct vision, which functions best when the object is not in motion.

B. Physiological Factors

No matter how large or well illuminated an object may be, no matter how much it contrasts with its environment, if the eyes are defective or vision is impaired, light coming from the object will not be focused on the retina. Consequently, the retinal image will be distorted, causing the image in the visual centers to differ in one way or another with the observed object. The following is a brief description of the anatomical parts involved in the act of seeing, and some of the variations from the normal which interfere with the proper functioning of the visual mechanism.

1. Size of Eyes

When the eyes are said to be defective, it is meant that they are anatomically imperfect, that they are either larger or smaller than the average normal eyes. The defect may be congenital, or it may have been acquired as a result of disease or accident.

Normal eyes are those whose size approximates the statistically average eye. If they are too large, they are only partially covered by the eyelids and give the individual a pop-eyed appearance. If the eyes are too small, they seem to be deep in the orbital cavity, accentuating the bony structure in which they are set, giving the individual an emaciated appearance.

An individual with large eyes is usually myopic or near-sighted, while one with small eyes is generally hyperopic or far-sighted. Functional disturbances, which will be discussed in a later section, may simulate near-sightedness or far-sightedness in eyes that are normal in size. In advance stages, these disturbances may even produce structural changes.

2. Cornea

A normal cornea, the window of the eye, is clear, transparent, and spherical in shape. A distorted cornea, or a cornea with an unequal curvature, is called astigmatic and, in many instances, is responsible for reduced visual acuity, because of the manner in which it refracts or bends rays of light entering the eye.

3. Inner Parts of the Eye

The inner contents of a healthy eye are clear and free of opacities, or dark spots, which interfere with the focusing

of light. The crystalline lens, whose function is that of a focusing mechanism, is transparent, resilient and capable of changing its shape or curvature as the demands arise with each change of the distance from the object viewed. The aging process reduces its flexibility and makes it difficult, if not impossible, to focus light on the retina. Glasses which compensate for the loss of flexibility of the crystalline lens are generally prescribed for seeing fine details at close range.

In the early stages of cataracts, in older people, the lens becomes soft again and therefore more resilient. For this reason many old people discover that they can read again small print without their reading glasses. Unfortunately, this "second sight" period is a short one, for it is merely a prelude to complete loss of sight when the cataracts become fully developed and opaque.

The retina, which can be compared to the film in a camera, is a net-like extension of the optic nerve and forms the inside coat of the eye, spreading itself like sections of an open fan from the back of the eye where the optic nerve enters. The retina in conjunction with the choroid, another inner layer, vascular in construction, serve to adapt the eye to various intensities of light so that the individual may see in the dark and in the light of varying intensities. They are aided in this by the iris, the colored membrane which controls the size of the pupil. If the light intensity is very high, the iris contracts, the opening of the pupil decreases, and the amount of light entering the eye is reduced.

The main function of the retina is to receive the image of the object viewed in space. This image acts on the tiny elements of rods and cones that are spread out like a mosaic within the retina. Here is where a photo-chemical change transforms the radiant energy which entered the eye to neural or electrical energy and starts its journey along the optic nerve to the visual centers of the brain.

While the entire retina is sensitive to light, with the exception of the normal blind spot which marks the entrance of the optic nerve, there is one spot within the retina which is more sensitive to color and for the identification of details. This is the macula or fixation point on the retina; and in normal eyes it is in direct line with the object being observed.

5. The Optic Nerve

The two-dimensional image formed on the retina sets up a chemical reaction which converts light into neural energy, and this in turn is conducted by the million or more fibers of the optic nerve to the innermost recesses of the brain, either by direct routes or in the form of relay stations, or as Sr. Charles Sherrington called them "nerve exchanges."

6. The Visual Field

The visual field of each eye is the not-quite circular area in space, representing the outer limits of visibility which surrounds an object while it is held in line of sight by direct fixation. The field of vision is greater on the temporal side than on the nasal side, where it is partially obstructed by the nose. Its over-all size is relative, for it is in direct proportion to the distance of the object from the eye—the greater the distance, the greater is the field of vision.

7. Eye Muscles

The six eye muscles that are attached to each eye control its rotations and fixations and move the eyes rhythmical-

ly and in unison. Since seeing is a binocular function, both eyes must be directed at the same time in the direction of the object viewed, so that its images will fall on corresponding areas of the two retinas. If the two images fall on different parts of the retinas, the observer usually becomes aware of seeing double when there is only one object in space.

The eye muscles have a potential capacity for contraction 50 to 100 greater than is ever needed in normal eye movements. Knowledge of this fact should dispel the erroneous idea prevalent that in a normally functioning eye there can be such an oddity as weak eye muscles.

C. Psychological Factors

The flow of neural energy along the optic nerve and nerve pathways arouses mental images within the visual centers of the brain. Because seeing is a binocular act, the organism becomes aware of the two images that are focused on the retinas. If the ability to fuse the two images is well developed, the individual sees only one image in space.

1. Fusion

Fusion, however, may not be stable, or it may be under-developed. In these cases, maintenance of one image is subject to fluctuations, depending on general body fatigue, the type of lenses one looks through, or on drugs which affect the higher cortical centers. It is a common experience to find oneself seeing double at times as drowsiness sets in, or when one looks through someone else's glasses.

2. Double Vision

The need to see singly, however, is an organismic one, for it has a survival value to the individual. If one perceives two cars when only one is approaching, the selection of the wrong image for the real one may spell disaster for the individual. Diplopia, or double vision, is therefore not tolerated very long. The organism makes adaptations, sacrifices clearness of vision and will tolerate a blurred image rather than to permit double vision. If double vision persists, it is an indication that perceptual difficulties are well advanced and that more radical concessions will have to be made to keep the individual seeing singly. Outside aid can be introduced to either eliminate the diplopia or to so change the ocular situation that singleness of vision becomes less difficult to maintain. Double vision which results from tumors within the brain are outside of the scope of this presentation.

3. Space Projection

The highest stage of perceptual development, with the exception of abstract thinking, is the individual's ability to project into outer space images which are aroused within the brain centers and to judge their distances in the surrounding environment. Some of the clues which aid in the judgement of distances are: interposition, that is, when one object obscures another and therefore appears nearer; size, the larger representation of one object in a group appears closer than a small one; and aerial perspective, those objects which are sharply outlined in the distance appear nearer than those that are hazy.

But not all three-dimensional seeing is due to visual clues. Much of the experience gained is contributed by the other senses. For example, the size of an object held in the hand is like the size of the object one sees with the eyes. The evolutionary development of stereoscopic vision runs parallel with the development of manual skills. The primitive hunter had little use for three-

dimensional vision. The demand for precise judgement of distances arose with the development of manual dexterity and skilled craftsmanship. Stereoscopic vision or depth perception is of greater significance to an individual at close range than at far. In the modern industrial age and in a world where close range seeing is ever increasing, three-dimensional vision is needed more than ever and, if for any reason, the individual fails to satisfy the organismic demand for single binocular vision, his level of achievement is lowered—regardless whether he is in an industrial plant or in a school room.

BOOK REVIEWS

HIGH SCHOOLS TODAY AND TOMORROW. By Charles W. Bursch and John Lyon Reid. New York. Reinhold Publishing Corporation. 1957.

Persons who don't want to think should not read this book as the authors provide so many ideas on curriculum and buildings that the reader can not help but be stimulated. Some persons will agree and some will disagree with Bursch and Reid regarding the desirability of the kind of school that they suggest. However, all will agree that we must take a look at the high schools of today and plan for the high schools of tomorrow.

This volume starts out with the scrutiny and stock-taking of our present program and plant. A high school program is then proposed along with the facilities and plant required to carry out this program. Numerous plans and suggestions are included to support the plant described. The most significant concept developed is that we must not be bound by the present concept of class units but must organize our programs and develop school plants according to the job that we want to do.

—Jerome Leavitt, Portland State College

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CULTURAL FOUNDATIONS OF INDUSTRIAL CIVILIZATION. By John N. Nef. N. Y. Cambridge University Press. 1958. $4.00.

The six essays of this volume comprise the Wiles Lectures given at Queen's University, Belfast, 1956, by John N. Nef, Professor of Economic History at the University of Chicago. Professor Nef in concerned with changing attitudes and interests in relation to a developing economy and a growing technology. It is his thesis that man's concern for beauty, truth and goodness have done as much to produce the modern world as have natural resources and economic institutions. It is to history as a whole that Professor Nef turns for the origins of contemporay industrialism. Beginning with the new methods of scientific inquiry in the sixteenth century, Professor Nef traces the events and developments of following centuries in such areas as mathematical thought, objective observation, and quantitative measurement. He also follows the developments in technology and the new styles in art and achitecture. Stress is placed on the growth of new scales of values and new emphasis in ethical thought. The birth and development of contemporary industrial society are presented in a clear and novel fashion.—William P. Sears

ELEMENTARY EDUCATION IN RURAL AREAS. By Clifford P. Archer. N. Y. Ronald Press. 1958. $5.00.

This volume has been prepared for students in elementary education who are planning to teach in the rural areas. The importance and significance of rural education are stressed and the problems of this vast section of the total educational program are identified. The author points out that a full knowledge of rural culture is basic to an understanding of rural children and to an insight into problems of curriculum content and teaching methods.—William P. Sears

High-Brow, Low-Brow *or* "No-Brow"

By MAXINE BROWN
and
WALTER BARBE
University of Chattanooga

OUR COUNTRY has come to the position where we worship the average. The only trouble with being average is that it is so mediocre—yet this is the category in which the "majority" strive to be. It is the category into which most people are placed, after heaving a grateful, "Whew, I made it." The unfortunate thing is that because most people do fall into this category, everything centers around them, everything is directed toward them, and they have every opportunity to do nothing and be complimented for their successful failure. "If it weren't for people like Joe, where'd the country be today?"

Perhaps the reason for this complacency may be that it is impossible to define this particular group. No one has succeeded in putting his finger on exactly what the capabilities and limitations of the average man actually are. Until such a clear-cut definition is made, the big majority of the population can rest easily for no one knows what to expect of them. Consequently, they do nothing but rest on their hard-earned label, "average man."

For lack of a definition, labels must suffice. Average, normal, majority—take your pick. Nothing will be expected of you if you can make the grade and woe be unto the man who is not striving to be in this group. Above or below are equally damned. High brow or low brow are equally bad. "No brow" seems to be the goal.

Labels, Labels, Labels

Pick your label. You're bound to fit into one. If "average" does not suit you, how about "normal"? If you are statistically inclined (that means you like numbers) mean, median or mode might be your choice. Mean is when you add them all together and divide by the number of people you have. If the answer you get isn't what you thought it would be, use what you thought it should be, for you probably made a mistake in arithmetic. "Ain't it a good feelin', being average?"

Now finding the mean is really very uncertain. So try the median—you know what that is. It's smack dab in the middle. You may be dumber than half; but, by heck, you're smarter than the other half. The security of this spot can't be questioned. You can't fall off, and nobody is going to push you off unless somebody else goes first. "Comfy?"

What's Your Rank, Corporal?

Because of individual differences, categories are needed. Not just one set of standard would do for all people. Some may like percentile rank, while others prefer intelligence quotients. If

neither really suits, the 100 score with 70 passing is still good. Even the old A, B, C rank is used in some places. (S and U are popular, but are frowned upon by those who really like to know where they are). But if none of these will really do, and they don't suit the majority, try mixing a few. It can be more fun than mixing metaphors.

Of course you know that percentile rank means how many people you beat. But this can be disillusioning for those who score at the 50th percentile, because they never failed a test before in their lives. A teacher said once that she intended to get half her class above the 50th percentile if it was the last thing she ever did. It is a pity that this wasn't the last thing she ever did. She's still teaching, and teaching some children who are not "normal." Well, maybe she'll straighten them out before it's too late. Incidentally, she later proudly reported that her goal had been accomplished after the first month and she just relaxed for the rest of the year.

There is one disadvantage in allowing others to mix their standards, however. For example, it is hard to answer the parent who asked, "I don't know why everyone complains about my son's 73 I.Q. Seventy is passing, isn't it?" Seventeen more points and he would have been average," but "that's life."

If you are normal, you have your label. Even those below average have a label—sub-normal. But those unfortunate individuals who are at the other end of the scale either have no label, or must be called abnormal. Of course, the group that is above average is so small that it is really not necessary to show them any special attention, and certainly not necessary to dignify their position with any special label. The safest approach to them is to ignore them, and maybe they will go away.

I. Q. is certainly the most misunderstood standard of all. In answer to the parents question, "I. Q. of 85. Eighty-five what?" The skillful examiner must attempt to explain the difference between 85 I. Q. points and 85 bags of beans. (The best explanation is usually akin to explaining the meaning of a word like "any" or "was.") The way out of this is to say, "Mighty fine boy you have, ma'm. Mighty fine."

Complacency and the Average Man

Complacency is a component part of every average man. This is what makes him average, and is what makes mediocrity so attractive. He's not necessarily the "let George do it" type, he'd rather it was not done at all. He surrounds himself with other complacent people, and in this way avoids the uncomfortable feeling that he ought to do something in life other than spend eight hours, five days a week checking to make sure the workmen are wearing safety shoes.

The average man may have been the backbone of the nation but that was when he lived so far away from his neighbors that he didn't realize how little effort it actually takes to exist. Say nothing, do nothing and be nothing is certainly the slogan of the average man. What is his contribution to society? Ask him and he will tell you he pays taxes. He's the one who complains when nothing can be done about it. He doesn't object to anything that could be changed with a little effort. He doesn't care who is president, as long as he voted for him.

His wife is a good mother. Or, at least, she's an average mother. She doesn't always know where the kids are,

but she is developing initiative in them. She votes like her husband because he tells her to. She doesn't know that her husband votes as he does only because the polls say that the majority of the votes will be cast for this candidate. (This demonstrates a basic law in the society of mediocrity—always stick with the majority because there is safety in numbers).

The children of the average man start off by being inquisitive and, worst of all, energetic. (Absolutely "must not's" in the society). But with the help of twelve years of schooling, this is most often cured and the children develop into average, normal, "no-brows."

Ground Rules for Methodical Mediocrity

Why is it that to be simple-minded is an insult, but to have a "simple life" is glamorized in both poem and song? If such a life is desirable, it is time that rules be set down under which one may operate in order that he will never be accused of being anything but normal.

1. In order not to upset this precarious position, which the average man must always be in, he must watch carefully what he reads. Newspapers are permissable if one limits himself to headlines, and city politics. Novels may be disturbing, but cannot be considered a breaking of the rule if no more than the first chapter and the ending are read. (After all, if the book is any good at all, it will soon be a movie).
2. He does not associate with people outside his class—especially people from the lower class. An occasional visit with one from the abnormal group is not too upsetting if he is certain to keep the center of the floor. To relinquish this natural right of the average class is to threaten the very bases of society.
3. Never challenge authority. After all, if they weren't right they wouldn't be the authority. See how simple it really is? With practically no effort you too may join the ranks.
4. Watch your local newspaper for announcement of sales. They are planned just for you.
5. Have a dog. It is so comforting to know that someone will always love you regardless of whether you make a fortune or not.
6. Attend movies regularly—particularly on Wednesday as it is bank night. No reason to check what is on. If it's from Hollywood it is good. (Those foreign films are just a waste of time, though).
7. Save green stamps, king cotton stamps, enter contests, identify with the man who wins the jack pot and, buddy, you've got it made.

Follow these suggestions and the nation will certainly be led to a position where there will no longer be anything but normal people. And then someone will think up a new category and the trouble will start again. Therefore, the only hope is to offer a practical plan of providing for the average man.

Homogeneous Grouping for the "No-brows"

Homogeneous grouping for bright children in school is frowned upon, but looked upon with favor for slow-learning children. Has anyone thought of grouping the average children so that they can be kept away from the challenges of

superior children? Instead of providing for the gifted, let's group the average homogeneously and see if they can't escape the upsetting influence of those children who are always wanting to do something. If those children who fall at the upper end of the scale would quit always asking "why" and give the average child a chance, then maybe this grouping would not be necessary. But since there are always a few children who will not accept things as they are, and insist on trying to find new ways of doing things that have been done successfully the same way for years, then let's get them away from the average child. When special classes are set up for average children, then the teacher will be able to teach without being bothered by those troublesome children who insist on thinking. It is true that under the present setup, some of these children do conform. Unfortunately, though, there are some who just will not submit in spite of all that can be done about it. (I even heard of one once who said that the teacher was wrong. Imagine!)

Some people favor identifying average children by tests, but the easiest way is just to watch them. The average child is always so sweet. He never disobeys, and only asks questions when he absolutely must. In fact, the teacher hardly knows he is there. Maybe he doesn't always know the answer, but does the average man know the answer? (Or even what the question is)?

Into which category do you fall? If you have made a choice, forget it—you're not average. Average people really have no choice. It's all the same, only the label is different.

BOOK REVIEWS

PSYCHOLOGY APPLIED TO LIFE AND WORK. By H. W. Hepner. Englewood Cliffs, N. J., Prentice-Hall, Inc. 3rd Edition. 1957.

This is a new edition, the third, of a book that has been popular since its first appearance in 1941. Because many readers will not have opportunity to extend their formal acquaintance with psychology, the author has endeavored to present both psychological principles that are fundamental and significant in life and work. He presents a foundation for a social philosophy that applies to our changing order so that the reader will be able to function more effectively in a position of industrial leadership. After presenting the reasons for studying psychology in part one, twenty-nine more chapters divided into five additional sections treat: (1) understanding the individual's behavior through the adjustment concept; (2) personal problems; (3) industrial psychology; (4) the consumer; and (6) how to read reports of psychological researchers.—S. M. Amatora

CURRICULUM PLANNING THROUGH IN-SERVICE PROGRAMS. By Harold Spears. Englewood Cliffs, N. J. Prentice-Hall. 1958. $4.50.

Like all the books from the pen of Harold Spears, this exploration of the in-service study programs for teachers and staff members is written in a forthright and direct manner. Dr. Spears gives a factual account of the in-service programs currently being used in typical school systems designed to improve the quality of instruction. The author indicates that these in-service training programs to a great extent merge with the tasks of curriculum planning. There is much fine material presented on such topics as the organization necessary for curriculum study, parent participation in school problems, the in-service orientation of new teachers, and expected results and limitations of in-service training.—W. P. S.

An Encounter With Communist Teacher Training

By MARY H. B. WOLLNER
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"DO COME and see what we are doing, and then you will know the things you hear about us are not so," was the earnest plea of the young man from the Eastern Zone of Germany to whom I talked at an international congress of educators in Italy last summer. The sweat on his brow was caused, I felt, in part by his earnestness and in part because he kept looking around to see whether or not he was observed by other members of his delegation talking to an American.

I said, "If it can be arranged, I'll certainly come to see you and learn what you are doing:" I am engaging in a voluntary investigation of schools and teacher training in a number of European communities. As I speak German fluently, an excursion from the West Zone into the East Zone of Berlin would, I hoped, be without too great difficulty.

Apparently the young man, a graduate in education at the famous Humboldt University of Berlin (now in East German control), learned that it was all right to talk with me. A few evenings later I again had a discussion with him and another graduate student, similarly a candidate for an advanced degree. Both were about thirty years old, had more than five years actual teaching experience, and were fathers of families. They explained to me that when I arrived in Berlin I would not be able to telephone from the West Zone of the city as the service between the zones is cut off. I declared myself ready to overcome this difficulty, if possible. So, on a scrap of paper, each of them wrote a telephone number, one of which could be reached in the daytime, the other in the evening, but I should have to find a telephone booth in the East Zone.

This formality over, and in the spirit of the international congress by which we were surrounded, one of the young Germans then began to urge me to consider how wonderful it was that in the first reader for all children in East German Schools international friendship is being promoted. "You see on each page the picture of a child from a different land and his name. This is Mischa from the Soviet, this is Nils from Sweden, this is Bob from England, and Ellen from America. Then in the final picture all are holding hands and singing and dancing in friendship. We teach peace to our children!"

"Then how do you, as fathers, explain to your six-year-old when he points out to you that this picture of international friendship is not accurate? Kids are not so dumb."

Their faces fell. True, kids are not dumb. Then the more extroverted of the two recovered himself to say, "We are at a loss to straighten out the con-

fusion of our children sometimes. They hear one thing at school, then when they come home, they may, by a slight twist of the radio dial, hear a broadcast from RIAS."

This was the last statement which might have been considered faintly honest that I was to hear, and even his remarks held the implications that Western Europe and the non-communists are at fault for confusing the children and spoiling this lovely picture of peace and brotherhood.

All my colleagues in West Berlin urged me not to discuss politics when I traveled over to the East Zone. They assured me that nothing could happen to me and that there was really no risk involved. But they gave these assurances accompanied by such grim warnings and such long faces, and, of course, often out of a background of personal tragic experience, that I could not quite feel reassured. I followed the advice and emptied my purse of all except my passport, a few coins of East German money, and enough West German coins for carfare. The best way to travel from one zone of Berlin to the other is by the elevated train, the S-Bahn. I made this trip, in the interests of this investigation, only a half-dozen times but each time with a measure of apprehension, if not actual dread. The physical appearance of the trains and stations in itself contributes to this sense of tension and foreboding, and so do the sober facial expressions and manner of restraint of the passengers in the trains. The season, besides, was November which in this northern city means a perpetual overcast sky so that you live at noontime in a kind of twilight and the rest of the day in the dark.

Although I had the anticipated trouble in reaching by phone my "contact men," at last an appointment was fixed and I set forth upon my venture. That day it was raining and my impressions of the dirty, charred buildings, still showing war's effects, the wide stony streets— nearly without traffic so that footsteps echo strangely—were only heightened by the dripping, flapping red banners and the garish building-posters reminding everyone of the "glorious October revolution."

One of the graduate students met me at the agreed-upon place and promptly escorted me to the fourth floor of the Central Institute of Pedagogy which, just as the name implies, is a state ideological center. I met, in fact, an exceedingly suave, bright gentleman, merely introduced as Mr. Miller, in his private office, complete with pretty secretary. The setting was, as I look back on it, uncomfortably like the Hollywood setting for a mystery with political overtones.—Every courtesy was extended: we sat around a table, coffee was served, and the conversation apparently flowed. The student excused himself presently and the official declared himself free and at the disposition of the interview. We were joined by another colleague, a benevolent type, who affected great simplicity. He had been born of the people, his mother took in washing, but he finally became a country school teacher; no degrees and no titles, but he has written a book on methods of teaching.

We talked about education and comparative education. They expressed great interest in the American school system and wished to know more about its organization. They complained gently that their information was meager and that they eagerly desired more.

What questions did I have?

I explained that I was studying teacher training, especially how it was

conducted and under what conditions action research on the part of experienced teachers was taking place.

This they answered as follows: the East German government spends proportionately very high sums of money on education and on teacher training. Two instances of governmental support will suffice. One fact is that the experienced teachers, a select group among whom were the graduate students I had met, are freed from their school district duties for three years, paid a monthly stipendium (500 east marks) plus subsidies for family responsibilities, plus book allowances, and are set to studying under the direction of the Central Institute and selected faculty from the University, and to doing research in attached schools. At the conclusion of their studies they write a thesis or project and stand an oral examination. Some then return to their school systems; others may remain there to become trainers of teachers in elementary schools. The shortage of teachers—and, of course, in particular teachers with the proper sovietized outlook—will be met in this way.

The second fact is that the government subsidizes all book publishing. Therefore, books, whether literature for young or old, or professional or scientific, are remarkably available and exceedingly inexpensive. This state of affairs is ruefully acknowledged in Western European educational circles.

I took it rather for granted that my informants would paint a glowing picture. When they still pressed me as to what questions I wanted to ask, I said I'd be interested to know how they explained to pupils, to a child in his developing years, that human nature is made up of both good and bad, that much growth is hampered by conflict, and yet that the acceptance of conflict is essential to human growth.

"Ah!" said the director, Herr Miller, gaily, you in the West are much preoccupied with such questions. Here, you see, we stress only the good side of the child, present him with good, strong models of leadership—in his schools and scout groups—and teach him the values of collectivism and world peace. We recognize only that economic frustrations have produced conflict and with the economic changes which we are introducing, we will reduce the bad effects of a bad environment while our upbringing of the child gradually succeeds in toning down (dämfen—muting) the bad impulses!"

"This could be extremely dangerous," I began. Whereupon both gentlemen became suddenly as if electrified by a single thought. With shining faces they announced, "But when you read Makarenko, all this will become crystal clear to you. You cannot read this book and remain unchanged!" They launched into a eulogy of the "pedagogical poem" of the Russian, Anton Makarenko,* recently translated into German, which describes the building of a "collective" for homeless waifs of the 1917 Russian Revolution, something like a work-camp-school project or rehabilitation of youth center.

"But we don't want to spoil it for you. Read the book and you will under-

*Makarenko, Anton Semonovitch. *The Road Into Life*, Moscow, 1950, Berlin, 1957. This book is, by the way, very readable and has some of the excitement of a good story as well as the interest of a pedagogical experiment. Its influence on Communist pedagogical thinking is a matter for longer critical concern. His "Lectures on Child Care," for example, present unequivocally authoritarian attitudes toward the child (also very popular in East Germany).

stand our enthusiasm," they chorused finally.

I understood, indeed, in that same instant what I was up against, what we are all up against, whether we are talking to Communists around a small table or a large table: a spirit of fanatical conviction. All roads used to lead to Rome. Now all the thought roads of the true believer in Communism lead back to his sense of utter commitment.

So for that day I departed, aware that we had conversed but really, of course, not had a meeting of minds. The overtones and undertones of the interview I summarized to myself as follows: "Don't ask us if we have any problems or any doubts. We know we are right because we have seen the light. Communism has all the answers. When everybody else sees it our way then will come the Utopia."

The second day of my visit included a school, one of the schools used for study by the Institute. It was a new school, four years old, built in one of the most crowded and economically-impoverished districts of East Berlin. The class I visited was a Fourth Grade with 42 boys and girls,—a demonstration class fitted up with a one-way vision screen so that, in an adjoining room, teachers may observe the lesson undetected. I sat, however, in front of the children facing them. The teacher was under a handicap, with a crowded classroom and two visitors, another of the Institute's bright young graduate students and myself, and the lesson itself held little of vital importance to Fourth Graders. It was a grammar lesson, on the declension of the articles, *der, die, das*. The children first received some written work handed back, upon which occasion the teacher told several how poorly they had done and admonished them in ringing tones to write more correctly and neatly. The recitation then went forward, lively but I thought mechanical. The children raised their hands and recited, but their attention was only superficially on the teacher and somehow subtly diverted. This undercurrent of secret restlessness was remarked upon to me by the graduate student. I did not envy the teacher and could sympathize with him when he complained of being overworked, especially with committees after school hours.

Finally, we located the principal of the school, a harassed-looking young man who appeared to be rather more the type to be a football coach or scout leader (he undoubtedly was both). Rather perfunctorily he did the honors of the building, especially two well-equipped science laboratories, then left us to admire the gymnasium alone and to be picked up by the Institute's chauffeur. My overall hunch about the school remains that there is much strain on the part of the faculty. This is due, probably partly to the difficult district and partly to the general sense of being politically on trial which all educational workers in this 11-year-old Communist state feel, and finally to the fact that all teachers are under pressure to act as Youth Leaders in the so-called scout movement (Young Pioneers).

Notable was the absence of any display of child art, apart from a few painfully-printed posters. Glass cases in the corridors were full of cups and ribbons, won by school sports teams. Sports are strongly emphasized.

The last interview was with the author of a new reader series which is universally adopted in the first four grades of the East German State. He, too, seemed delighted to receive me and

set forth the inevitable coffee and conversation.

"Tell me," he said winningly, after he had displayed his texts—described his love of his work, "what do they say about us in your country?"

"Well," I replied repressing a slight inner quaver, "it is said you have merely substituted one fascism for another."

"Now there!" he exclaimed very heartily, beaming at me, "you can *see* for yourself it is not so! We are far from authoritarian here. We all work together as friendly colleagues for the cause of peace."

However, he next tried a method of attack. "I can't understand," he said, "how you can permit those dreadful horror-comics to continue. Here we simply refuse the publishers paper and they cannot print any such trash to corrupt our children and our youth." He showed me samples of approved comics printed with government approval.

I took another little breath and replied: "We are indeed concerned about such problems and are proud of the cooperative efforts of many citizens, parents, teachers and book publishers to work through an improvement in comics literature. But, you see, we in the United States are very shy of any kind of press control."

This he found, as I expected, abhorrent. No such long way around for him and his colleagues! They were possessed, he stated, of a daring optimism." Yes, and they believe universal peace must be realized through their approach.

"How do you propose to get at the roots of war?" I queried. "What do you plan to do to take care of competitiveness and conflict in the atmosphere which surrounds the cradle and which influences the growth of the individual? Must we not first understand the misunderstanding which takes place in one-to-one relationships?"

"Ah, that would take a long while to discuss."

He had another appointment. And I took my leave on that note. Yet I was sure he would still insist on the short-cut answers. The Soviet State will simply tell families and individuals not to be competitive, but to be loving and cooperative only, and they will obey. In effect, the dearest wish of those with whom I talked would be to run a sort of Spartan State where children at an early age could be snatched from the family (where indivdual ethics might get a start) and be placed in residence collectives (This accounts for the popularity of the Makarenko book—his pupils *had* no parents.) so that all controls could be exerted to create citizens for the State. Since this cannot quite be done as yet, parents are given very specific instructions (see Makarenko's lectures, translated into German: *Lectures on Child Care*) on how to behave toward their children (exceedingly manipulatively) and how to raise them up to be loyal collectivists. The old European model of parental authority and sense of responsibility in which everything a child does, says, breathes, thinks, or dreams must be closely supervised, is, alas, a very good structure on which to build this new picture of the family blessed only in terms of its responsibility to raise good citizens for the State.

It almost makes you think that the casualness and equality of adult-child relationships in the United States constitute, after all, good safety valves against any totalitarian encroachment.

My plane leaving Berlin a few days later was more than half-full of the daily quota of refugees, leaving the East zone and seeking a new life where they

could bring up their children as they wished; all worker-families with two or three babies.

Perhaps it is hard work for us to continue to try to bring up our children in some understanding of human psychology, of themselves, of their mistakes and their weaknesses as well as their strengths and capacities for growth, but the alternative—bringing them up by code and slogan, in total intellectual and emotional dishonesty—is a betrayal of their essential humanity. How do you live when you've been betrayed? You live for revenge. Your lips may speak the pretty formulas about universal brotherhood, but in your heart slumbers fearfulness and treachery. It is a rare miracle, although it *does* happen, when courage and a love of truth can break the bondage of a totalitarian environment.

BOOK REVIEWS

MANAGEMENT OF THE HANDICAPPED CHILD. By H. Michal-Smith, Editor. Foreword by Arnold Gesell. N. Y. Grune and Stratton. 1957.

Dr. Michal-Smith, chief clinical psychologist at Flower and Fifth Avenue Hospital in New York and a professor of pediatrics of the New York Medical College, has gathered together nearly twenty authorities who deal with the diagnosis, treatment or rehabilitation of handicapped children and the result is this useful book. There are chapters on the child with severe behavior disorders, the child with "nervous" habits, the mentally gifted child, the socially and emotionally deprived child in institutional care, the child with speech and language disorders, the visually handicapped, the child with impaired hearing—in fact, the whole range of disorders and handicaps that claim many of the nation's children. A final chapter considers community aspects and the care of the handicapped child. A list of recommended readings for parents concludes the volume.—W. P. S.

TECHNIQUES OF SECONDARY SCHOOL TEACHING. By Ralph K. Watkins. N. Y. Ronald Press. 1958. $5.00.

The outstanding feature of this book on the principles and techniques of good teaching is its excellent arrangement. There are numerous texts on "methods of teaching," but few can compare to this one in its recognition of the needs and interests of those who will study its pages as they prepare to enter teaching. The emphasis throughout is on how the operations involved in good teaching are performed. The content of the volume is built aound a series of major questions—What Is Worth Learning?; What Must Pupils Do to Learn?; How Can the Teacher Direct Learning?; to mention but three. The order of presentation corresponds to the steps a teacher would employ in carrying out his work. Each major unit is divided into subunits. At the beginning of each unit, there is an introduction addressed to the reader. Then, at the beginning of each unit or subunit, there is a list of questions—What To Look For—to be used as guides in reading and as possible centers for discussion. At the close of each unit or subunit, there is a section called "Unit Implementation." The whole concept of unit planning and unit use and evaluation is introduced from the very start. As a text, "Watkins" should prove especially effective.—W. P. S.

80 PUERTO RICAN FAMILIES IN NEW YORK CITY. By Beatrice Bishop Berle, M.D. N. Y. Columbia University Press. 1958. $4.75.

This is the report of a medical study carried out in a slum district of New York City. It should be of interest to the many teachers who are teaching in schools that have large number of Puerto Rican children in their classes. The study was concerned with the environmental factors in the lives of these Puerto Rican migrants that influence illness as well as with the medical aspects of disease.—W. P. S.

Can *the* Schools Help Industry With Communications?

By RICHARD SEXTON *and* VIRGINIA STAUDT
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DURING THE LAST decade business and industry have found increased need for the improvement of communications. Employees at all levels, including supervisors and executives, have been found deficient in writing, reading, speaking, and listening skills which comprise the elements of communication. Accordingly, industry has had to furnish further training in the language arts beyond that with which employees' school training has equipped them. On that account business and industry have invested substantial sums of money to establish institutes, to bring communication specialists to their premises, and to send their personnel to various schools for the requisite training. Employees are thus being taught to write, read, speak, and listen more effectively in carrying out their job functions.

Some concept of the enormity and complexity of the communication problem may be gleaned from a perusal of the extensive bibliography of books and of articles in professional journals (3) and in popular business literature. These writings analyze various aspects of the communication problem—content, methods, and the like, and propose diverse approaches and solutions—psychological and verbal. With marked diversity in approaches, analytical techniques, and constructive suggestions, most writers and investigators appear generally agreed on two points: 1. The need for improved communication in business. 2. The need to train employees in commmunication

After considerable practical experience in communication training in school and industry, and after a rather extensive review of the literature in the field, the present authors are of the opinion that industry's need to train employees in communication skills poses a real challenge to teachers in our high schools and colleges. Writing, reading, speaking, and listening are fundamental skills. Proficiency in these verbal areas is demanded in everyday living, in social situations, and on the job. The fact that industry is currently finding it necessary to reteach its employees these basic skills indicates that they were inadequately learned in the first place, and suggest that in some instances they may even have been poorly taught.

This inadequacy discovered by industry in employee communication may, in part, be due to the fact that instruction in the language arts in the school —in writing, reading, speaking, and listening—is still kept too compartmental. Only within the last ten years, as Wagner (4) has stated, has listening

been given attention in the way of systematic instruction. An increasing number of curriculum guides for the language arts now stress teaching the art of listening. Actually writing, reading, speaking, and listening are all interrelated. Therefore teaching communication cannot be done effectively on a partitioned basis. The present authors in describing a clinic approach to the business communication problem (1, 2) have emphasized the need of the four verbal skills.

It is equally important to recognize that communication involves psychological as well as linguistic elements. The psychological elements are those which embody human qualities in the context of expressed ideas. The linguistic elements on the other hand are peculiar to language itself, to the words and verbal structures employed. Only in theory is it possible to consider these elements discretely. In actual communication they are completely fused. Any communication, as soon as it is written or spoken, is infused with human meaning beyond that resident in the mere words or verbal structures of statement. This is clearly implied in the standard distinction of denotation and connotation which is applied to word meanings.

Since the school provides the first formal language training, and since schooling is meant to be a preparation for life, it follows that language training in school must be in large measure thorough, realistic and practical. Moreover, in view of the psychological and linguistic nature of communication, the school must provide language training in both its human and its verbal aspects. Psychologically, improved communication demands that the communicator be trained to identify the real character of the subject matter he is discussing in relation to his own nature as a human person, and to that of his potential readers and listeners. The student must be taught to think, both creatively and reflectively. As a communicator he must try to keep his thinking scrupulously free from prejudice and bias. He must learn to structure his ideas with completeness, clarity, and coherence. Moreover, he must become critical of his own ideas. He must be taught inter-and intra-personal aspects of communication as they relate to his status as a human being in a human social climate.

On the linguistic side, a student should acquire practice in every class in delimitation of word meaning, and in distinguishing between denotation and connotation. This would help to improve sensitivity to word meaning, a characteristic noticeably lacking even among many college students. Perhaps a more fundamental linguistic weakness in today's students is a marked tendency for them to be overly confident of their own word power. In view of the known correlation between word power and leadership, one cannot help but feel that many students would profit significantly from concentrated vocabulary building. Moreover, the student ought to learn to be concise in writing and speaking, to indulge in less generalization and more particularization. Experience with current student weaknesses implies that both content and formality of expression demand attention in the school.

Education is a preparation both for living and for "earning a living". Since the language arts are so vitally connected with personal success in every sphere, it would seem to be in order that schools take every possible step to improve them, in instruction, in learning, and in practice. Communication in-

volves both the personality and the verbal capacity of the student. Improved communication requires intensified concern with both the personality and the verbal areas of communication. In English and speech classes because of instructional emphasis, materials and objectives students are encouraged to be more sensitive to the use of language. But every teacher must become a kind of communications instructor if education is to achieve its potential in communications. Teachers in other subject areas should try to transfer and preserve in their classes some of that sensitivity to language which the language teacher imparts. It goes without saying that every teacher should himself be able to communicate effectively if he is to develop this ability in others.

To express oneself effectively in writing or in speaking, and to be able to understand the written or spoken word of others, are vital necessities for successful and satisfying everyday living. They are becoming ever more important for vocational success. To teach the student these language arts is the school's task. When that task is successfully carried out employers should be able to assume proficiency in these skills in the graduates whom they hire. They should be able to build upon this proficiency and develop it. Our graduates should be ready to be groomed by industry for its own particular communication needs without requiring generalized training first. Unless a marked improvement appears, there is every likelihood that contemporary schooling will have failed in meeting its own communications challenge. In previous generations reading and writing were two of the three prime targets of the most elementary education. Shall they not now become at least gunsights to the more complex targets of our generation, especially those in industry?

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Time Out *for a* Grin

How Easily *and* In What Ways Do European School Children Smile?

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DURING THE LAST summer a group of forty-two American educators visited European schools in action. It is the first time that a group of educators has gone to The Continent to make an intensive comparison of the problems and practices of European schools with our own.

Although the chief purpose of the mission was to talk with children, teachers and administrators, tour members developed certain "child-centered" hobbies which they rode throughout the jaunt. There was Frank who took as many pictures of youngsters-in-action as he could find; there was Louise who asked of any child she could corner: "How did you learn to take such good classroom notes on what teacher was saying?" "What do you do with your workbook when it is filled?" or "Where did you get those good-looking leather pants?"

Floyd, who was on the verge of retirement, insisted on testing, personally, every piece of playground equipment, while Miss Burton's busy pencil recorded school devices to prevent trouble or accidents: the keys to school windows kept in teacher's pocket, the pegged stair rails to discourage sliding pants, or the signs forbidding adults to climb in playground jungle gyms.

The hobbies were incidental to the principal purpose of the trip, but acted as a simple and relaxing escape between lectures and visits to study classroom and administrative problems.

Perhaps the most naive and uncomplicated hobby was my own attempt to elicit a smile from the children of different countries. In my work with schools in the States I had for years practiced drawing a smile from the pupils. Some responded to my own smile, and others were strangely timid, but no particular pattern of responses was identifiable; some city youngsters smiled readily, and some did not; some country children were smiling before I presented the stimulus of my own smile, whereas others remained sober through any effort on my part to bring forth a grinning response. Sometimes the kindergartener reflected his delight, but as often it was the high school junior.

It was interesting, therefore, to perceive in the children of each European country visited what appeared to be a pattern of responses to my deliberate effort to convert a sober or downright unhappy expression into a grin.

In the Scandinavian countries, for example, most of the children were either already smiling or ready to smile on the slightest provocation. The older school youths had lived close to the austerity of the war years, and some

psychoanalyst might say these early frustrations might be uncovered later in their lives, indicating that they were not the happy youngsters they appeared to be on the surface, conscious portion of their Egos. Yet whether they had lived through the Nazi regime or been born since, these healthy youngsters from farm and dairy countries were more frequently than not wearing their smiles before they were approached. In passing school children in the corridors, or bending close for photographic impressions of their playground exuberance, these hedonic youths of the Skagerrak wore their smiles where they could be observed at any moment, or shamelessly displayed with only slight inspiration.

While the Viking experience had given me little opportunity to test the effectiveness of my own smile stimulus, the technique proved even less effective in Western Germany. Here the children had also been through the traumatic war experience. But far more of them than in Scandinavia had lost one or both parents, and the ruins around them were sad reminders of what had so recently happened. Throughout Western Germany the children appeared serious as they pursued their studies. Some older youths said quite frankly that their country was not happy to remain under the domination of foreign troops, that it was mature enough to become emancipated from dominating conquerors. In the same breath they expressed the urgent necessity for our troops to remain, for the very day of withdrawal, they felt, would be a signal for the Russians to move in and "unify" the country. The fears of their elders were obvious in their faces, and the smiles, with few exceptions, appeared through reluctant conditioning. Here was a disciplined formality and a seriousness of purpose to even the trace of a turned-up mouth.

I was still feeling that my own smile had not been given a fair chance at encouraging children to grin when our group was suddenly whisked over the mountains into Switzerland. Here was fresh encouragement to try my stimulus smile, for the Swiss smile was as prompt as precise as the movement of their watches. Indeed a popular teacher-training course is in Methods of Group Singing, and before recess the school children may burst forth in five minutes of exhilerating song, often in parts, frequently with yodels, and sometimes to the accompaniment of a strumming guitar. Windows may be opened wide for the occasion, for the mountain air would appear to assist the transition from class to playground. The type of song is indicative of their spontaneous joie-de-vivre; their smile may not be already there, as in Norway or Denmark, but it is close to the surface, and they carry it easily to the playground, up the Alpine poles where they prepare their arms and legs for later mountain adventures, then back into the classroom where even their recitations are punctuated with well placed laughter.

Even in the German-speaking parts of Switzerland the sunshine of adjacent Romance countries seemed to have penetrated to the faces and the hearts of the people. Here was most encouraging evidence that a smile brings a smile.

No reminder is necessary that the Dutch, with their broken dikes and floods, have experienced some of the most disheartening and penetrating hardships of recent years. Parents and children alike have reason to be sober. Their lives have been physically hard; the children seem to feel a stronger

home rule than some of those from other Continental countries. The decision of father is somehow final. This in itself, according to modern American psychology, should tend to make children grin with conflicts and ready to squirm from under parental rule.

Dutch parents and children seemed to have an in-spite-of-it-all smile that was easily brought forth, especially in areas outside the hustle and bustle of the big, moneyed cities. There was no evidence of bitten lips on the part of these children. By contrast the grown-ups would, on slight provocation, talk bitterly of the horrible days of Nazi occupation. Their hate was deep-seated, yet their children, contrary to their elders, delighted me when they demonstrated once again that my smile stimulus worked. This was the first country we had visited where there was an obvious contrast between generations. The best hope for Holland is in the future expansion and economical development of its land; parents, seriously and with great faith, have charged their children with the weighty responsibilities of improvement, and yet it is the children who possess the more ready smile.

Rural France was also visited, and the adventure of smiles was again revealing. School here was not in session, and it became immediately apparent that it was not easy to corner and grimace at children running in vacation freedom. Also with high walls or hedges of suspicion around farmhouses the children at play were not readily observed. The mistrust built around parental farms was apparent in the faces of the children—skepticism of neighbors, of those from adjacent villages, of the Germans, the Russians, and equally of the Americans. My smile drew the same blank it had in Germany, but underneath it must have been more suspicion than fear.

Perhaps the most valuable part of the French experience toward this bit of informal "research" was a conviction that the most reliable and efficient way to study puerile smiles was in a classroom or school yard.

Conclusion

After only a few weeks of close observation of childhood expressions there can be no effort to come to any scientific conclusions, nor should there be any attempt to draw laugh lines across the face of Europe. The diversion did appear to yield interesting contrasts in reaction to a grin stimulus and gave me an opportunity to exercise my own smile to see what results would follow.

Over a century ago Horace Mann returned from a trip to European schools to report that American classrooms needed more smiling teachers and laughing youngsters. There is much evidence that American children are happier in their schooling than they were a hundred years ago, yet it is apparent to me that even with unstreamlined methods and the good old fashioned curriculum the European youngster, whether his smile comes readily or is already there, still has something to teach us in the form of disposition.

Program *for the* Superior Student

By WM. WENDELL WILLIAMS
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Superior And Not Gifted

WE HEAR so much today about the gifted student. If we were to examine the student body of an average school, we would find that only 1% to 4% of the group would fall into the "gifted" category. These students have an I.Q. of 130 and above. The small number of students in this group would make it almost impossible to form classes that would be justifiable to the public, since the cost per student would greatly exceed the average.

Our schools have very definitely neglected the student with a higher learning ability. We talk of democracy in our schools and of how unjust it is to segregate the superior student. Yet, if we accept the development of each individual to the optimum of his ability as our philosophy of education, we must consider carefully the grouping of our students. It is a rather simple task to bring the superior student down to the average. On the other hand, we realize and concede that it is an almost impossible task to bring the educable and trainable student, the less "gifted" student, up to the average. Doesn't it make as much sense for us to stop trying to bring the superior student down to the average as it does to try to bring the trainable student up to the average? Our schools must realize the importance of adjusting to the indivdual students rather than asking the individuals to adjust to the schools. If segregation is wholly undemocratic, we are most certainly guilty of this offense in segregating the educable and trainable. Segregating the superior student, then, is unquestionably democratic, since it affords opportunity for the development of his distinctive capacities in the same way that this opportunity is afforded students of average and low ability.

One of the fundamental principles of democracy is equality of opportunity. Very frequently, there is a tendency to confuse "equality of opportunity" with "identical opportunity." This misconception has hindered the development of the superior capacities of the gifted, because their individual needs have not been stimulated and satisfied. By placing the gifted and superior student in special classes, we are answering the purpose of democracy in trying to develop each person to his optimum ability. It is obvious that a group of students with an I.Q. of 120 and above, who are capable of achieving all A's and some B's, can move much faster than a slower average group. These students, grouped together, can use their intellectual powers to a fuller extent because standards of achievement and accomplishment are higher. Such a program need not be termed "gifted," but could be classed as one for the superior or faster-learning student.

Plans In Effect

Various plans are in effect for teach-

ing the student who is capable of learning at a faster rate. One plan is that which provides enrichment in the regular classroom, where students are grouped together regardless of their learning ability. This program says, in effect, that the teacher is capable of dividing the class into various groups, and that each group can learn according to its ability and interests. Thus, both slow and fast-learning students are thrown into designated groups within the same class. Whether you call them red or white, the students in these classes are well aware of their classifications as slow or fast. The teacher must move from group to group and is obviously over-burdened with many assignments per day for the same class. A teacher in this situation rarely has the time to guide the efforts of the better students because of the demands made by the slower students. Neglect of this kind can do more harm than good. Faster-learning students in a regular class soon discover that little effort is needed to lead their class. They are not stimulated to greater achievement, since they feel that little is required of them for a superior rating. This is not answering the real purpose of true democratic development.

Another plan which seems to answer the plea of some is to permit all students to take certain subjects of special enrichment interest. Thus, a student who professes an interest in chemistry can enroll in an enriched chemistry class and not in other areas. This would present a school program with special classes in all areas, enabling the student to select those subjects he would especially like, or is especially qualified to study. The program would operate somewhat as follows: Many students in the freshman year would want to take enriched science and math courses and continue them throughout the sophomore and junior years. Some of these students would want to enroll in an enriched physics class in their senior year. On the other hand, there might be some seniors extremely interested in physics, but without the background of enriched science and math. Conseqently, if this group joined the enriched physics class it would be lost with the students who had gradually built up their background for the physics course. This would create a hit-and-miss situation of students totally unprepared along with those who had developed the necessary potential over a three or four year period. The program would lose continuity, consistency, and its purpose of enriching the student throughout his high school career.

Acceleration is another plan advocated by some educators. It is thought that placing a gifted student with older groups of more mature mental ability will improve his motivation, will enable him to develop effective study habits, and will permit him to complete his formal education at an early age. The proponents of this program fail to realize the dangers that might prevail. The child might compete intellectually with older groups, but one must constantly be aware of the physical and social maladjustments that may result from a student's placement with older classmates. Acceleration or "skipping grades" would definitely result in the loss of fundamental skills and processes gained by the student in the normal course of events.

A fourth type of program would be much more organized and dynamic. It would consider the whole child as an individual. Children who have the ability and ambition for an enriched

program would start in the ninth grade. The criteria for eligibility in such a pattern would be: high grades, an I.Q. of 120 and above, teacher and guidance department recommendation, good physical and mental health, and parental permission. The critics say that this plan neglects those individuals who have a great flair for writing in English, or for atomic research in science, or for some type of math. However, in examining the Terman 30 year study, we note that there is a very high correlation for the ability of the gifted student in all areas. In other words, if a student can perform outstandingly in math and science, he should also have the ability to do a respectable job in English and the social studies. Students selected in such a manner and grouped only in certain subjects can progress at a much faster rate than those in other classes. The increased rate of learning among these students will allow more time for the teacher to guide each one into activities of a creative nature and to stimulate them to explore and analyze new ideas experimentally and critically.

River Dell Plan

At River Dell, we feel that the latter plan is the best and most appropriate. In our seventh and eighth grade classes, we study each of our students and select those superior individuals who can best profit from an enriched program. After studying students in the seventh grade, we have found many who are very weak in the basic fundamentals. Therefore, in the eighth grade, we group these students in major subjects of English, math, science, and social studies, and try to bring them to a much higher level. By so dividing the group, we feel that there is a better opportunity to select the students who are capable of carrying on an enriched program in the ninth grade.

Students are selected on the following basis:

(1) grades made in their subjects; (2) their I.Q.; (3) teacher recommendation; (4) physical and mental health; (5) student's and parents' consent.

In this way we make it perfectly clear to the parents that we are offering a certain type of program which some will want their children to take, and some will not. So far, very few parents have objected to such a program. This program does not aim to isolate any pupil from his class or from his friends. In all four years, that is, nine through twelve, the pupils are grouped heterogeneously in the homeroom, in physical education, foreign language, music and art classes, in the shops, and in other electives. In the ninth and tenth years, the students who are selected for this program are grouped in English, math and science classes. In the eleventh and twelfth years, social studies is added to these categories.

We feel that such a program should be enriched on horizontal and vertical planes. The enrichment in math and science is definitely on a vertical basis; that is, five years of work will be completed in four. In the English and social studies areas, we feel that the enrichment should be accomplished on a horizontal basis. In English there will be more theme writing, a more creative and imaginative approach to discussion, research papers, and greater depth in the study of literature. The same general principles would apply to junior and senior American history classes. This gradually leads the student to a more complete college pattern of working and thinking. Thus, college prepara-

tory students could be the only ones participating in such a program.

Only those students who have all A's or B's in the beginning may embark upon such a program. A high C might be considered, but this would definitely be an exception. The student would be expected to maintain his A or B average. If he could not maintain this average, he would be put on probation for two months and then dropped from the enriched program, if he showed no improvement.

Teachers For The Superior Student

In order to carry out a program for the superior student, we must have superior teachers. It is imperative, therefore, that we select the best teachers, the most inspirational teachers, and put them with superior students.

The inspirational teacher is the one who manifests unlimited enthusiasm in his job. He is constantly striving to locate special talents in each student, and to arouse in him the power to think for himself. He is always stimulating and nurturing the student's powers to greater heights of initiative, creativity, imagination, and self-realization. The critics of the program object to using the best teachers in classes of superior students. They say that these teachers should be with the average and below average students. Such a program can be successful only if we employ teachers who have a depth of knowledge of their subject matter far beyond the average, and a genuine knowledge of human relations.

Early Results

It is too early to record the results of such a program. Nevertheless, we have found that there is a high correlation between students selected for the enriched program and their choices of outside extra-curricular activities, such as football, basketball, band, cheerleading, newspaper, majorettes, and student council. It has been noted that students in this group study more and accept greater responsibility than in the past. Since they have entered the enriched program, many students who had hitherto completed their homework in school find it necessary to work at home on many of their assignments. In some subjects, the students in the enriched pattern are progressing twice as fast as those in the average classes.

One of the most encouraging observations is that the students are enjoying these enriched classes and do not resent the additional required work. The average student should spend two or more hours on his assignments, while the enriched student need not spend any more than three hours on any one night. We sincerely hope that the additional work in the enriched courses will be kept to a minimum. Consequently, the program will not become too burdensome and there will be less danger of its failure.

We are convinced that such a program is necessary for the realization of the needs of superior students. Since the program is designed to develop to the maximum those qualities which will make the students happy and successful persons throughout their lives, we feel that we are not making intellectual snobs of them. We are guiding our superior students to make plans that are commensurate with their ability. We are inspiring leaders for our democratic pattern of life.

Activities *of* Beginning Teachers

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HOW BUSY A person is the beginning teacher? Does the job require more than the tasks of teaching and of planning for teaching? Is the young teacher occupied with professional and community activities outside of the school? Are home responsibilities a significant force?

Affirmative answers were found to these questions in a survey which was conducted to ascertain the extent of the activites of a new elementary teacher. There were 52 responses to the survey questionnaire which had been sent to 122 beginning teachers, all graduates of Hunter College. The majority of the persons are second or third grade teachers, although all grades are represented by them; and most of the teachers are employed in New York City and in nearby counties of New York and New Jersey. Persons included in the survey had no more than four years of teaching, as they had entered teaching during the period from the fall of 1953 through the spring of 1957.

It may casually be assumed that beginning teachers are rarely given extra assignments during their first few years, and that principals and school officials would urge them to concentrate on teaching. The survey revealed that three-fourths of the new teachers were assigned extra duties in the schools. The assignments reported may be classified under three headings: committee work, supervisory duties, and miscellaneous tasks.

Committee Work

Committee work concerns: (1) *professional* matters such as teacher associations, staff relations, salary, social planning, orientation of new staff, and plan books; (2) *curriculum and curriculum development,* including ceramics, map study skills, grade leaders and representatives, socialization, procedures and related skills, and gifted children; (3) *miscellaneous* special activities such as revising report cards, hearing test referrals, school policies, fund raising, the Red Cross, the rexograph, and discipline.

Supervisory Duties

Supervisory duties assigned to and accepted by the new teachers involved in the survey include: (1) *facilities* such as selection of filmstrips and scheduling movies, the music library, the record collection, the organization and supervision of the school library; (2) *affairs* including supervision of student teachers, coordination of grade dance festival, bulletin boards in general, bulletin boards for student teachers, and the school newspaper; and (3) *responsibility for children.*

The latter duties involve many activities important to the school community notably: (1) regular school routines such as supervising the lunchroom, playground, hallways, stairways, bag lunches; (2) assembly programs including music appreciation programs, the color guard and serving assembly

chairman or song leader; and (3) special services and extra-curricular activities such as supervision of the speech therapy program, individual and group guidance, school banking, and serving as health leaders and counselors.

Miscellaneous Assignments

Some new teachers are performing special teaching assignments along with their regular teaching, such as remedial reading, special experimental reading classes, giving individualized reading instruction, English instruction to a foreign child for three hours per week, film projector instruction to staff members, and science, nature and science, sewing and photography instruction. No comment was made by any of the survey participants pertaining to their feeling of adequacy or lack of it in connection with these assignments.

Miscellaneous assignments in which some beginning teachers serve include guiding teachers from other schools on the intervisitation program, school representatives for hospitalization, the teachers' council, and the PTA; secretary for faculty conferences, and writing news releases for local papers.

Professional Improvement

After school the beginning teacher is a busy person too, with professional, community, and home affairs. A study of these activities shows that they are as varied and sometimes as time consuming as the in-school activities.

Professional activities reported show that 42 per cent of the persons included in the study are engaged in graduate study. Nearly one-eighth are members of professional organizations, one tenth are studying for self-improvement in fields such as conversational Spanish, mental health, piano, first aid, and workshops for new teachers. Some of the graduates (5.76 per cent) consider concerts, the reading of school publications, and attendance at faculty meetings as their professional activities, while the same per cent do some teaching in their after school hours (arts and crafts at a community center, tutoring a first grader, and teaching at a Hebrew school). Fifty per cent did not indicate their professional activities.

Community Life

Church work involves the largest number of persons (25 per cent) who engage in community activity, although 73.77 per cent or nearly three fourths gave no indication of community participation. A few more than one-tenth of the graduates are assisting the scout organization, 7.69 per cent are working with the PTA and the same per cent are teaching in community centers (art, typing, English to foreigners, adult education).

Only 5.76 per cent listed membership in social clubs, and 3.84 per cent in charitable organizations, and there was one member of a veterans' organization.

Home Responsibility

A majority (55.76 per cent) mentioned that they are housewives, one-tenth of whom are mothers, and 3.84 per cent are widows serving as heads of the household. Miscellaneous home responsibilities include contributing financially, doing the cooking, taking care of an ill relative, and helping with housekeeping. One-third of the persons gave no indication of their home responsibilities.

This survey seems to indicate that the beginning teacher is immediately put to work on a variety of extra school

duties. In addition, many have accepted professional and community responsibilities in their after-school hours, some of which take them back into the school atmosphere as students or teachers. Home responsibilities require the energies of more than the majority.

Further Study Needed

It appears therefore that there are some questions to be answered through further study with regard to the activities of the beginning teacher. Some of these questions are related to the responsibilities of administrators and school officials:

1. How soon should new teachers be given extra assignments?
2. How do the extra assignments affect orientation to teaching?
3. How do the extra assignments affect the actual teaching performance?
4. Do extra assignments promote a feeling of security or job satisfaction?
5. Should there be set up a sliding scale of difficulty or responsibility of duties?

From the standpoint of teacher training institutions, one of the main issues is that of facing the fact that new teachers are required to perform a variety of duties in addition to their grade assignments. This perhaps points to a need for study of the kind of preparation undergraduates should have in order to help them to meet these job requirements.

BOOK REVIEWS

LYTTON STRACHEY: HIS MIND AND ART. By Charles Richard Sanders. New Haven. Yale University Press. 1957. $6.00.

Those who read Queen Victoria and Eminent Victorians when these two volumes first appeared were aware that a new approach to biography was developing. Lytton Strachey blazed a trail that led away from the traditional type of biographical study. It is true that he, and those who followed in his way, toppled many a figure from a pedestal. Whatever 1958 may say about the nature and goal of biography, Strachey remains a pioneer, and a pioneer of vigor, honesty, and accuracy. In this volume, Mr. Sanders looks into the background and values of Strachey and studies the man in relation to his environment and background—William P. Sears

AN INTRODUCTION TO RESEARCH PROCEDURES IN EDUCATION. By J. Francis Rummel. N. Y. Harpers. 1958. $5.50.

Those beginning the scientific study of education and embarking upon research will find this an excellent text. The approach is through scientific method—the basis for all valid research. Both graduate students and those who are entertaining a career in research will follow with ease and profit the materials of the volume. After an introductory chapter on the nature of the scientific method of research, the author pitches into the core of research—the selection of the problem, the preparation of the research proposal, the collection of data, the analysis and treatment of data, the design of experiments, and the writing of the final report.

—W. P. S.

THE AMERICAN STOCKHOLDER. By J. A. Livingston. Philadelphia. Lippincott. 1958. $4.95.

American education—from kindergartners to deans of graduate faculties—are, on the whole, woefully ignorant of the world of investment and finance. It is not infrequently that one reads of the demise of some ancient educator and the discovery of not only the carcass but of a sizeable fortune tucked away in a mattress or with the safety of a cracked teapot. *The American Stockholder* tells a great deal about corporations and their workings. The author, the financial editor of the *Philadelphia Bulletin*, demonstrates a keen insight into the corporate mores and practices of today. The book should challenge every educator and should provide him with a sound basis of knowledge when he begins to invest his hard-earned savings.—W. P. S.

The "Organic" Theory *of the* Teaching *of* Reading

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SPECIFIC THEORIES of teaching and learning run the risk of being incomplete and inaccurate when they are without the guidance of a systematic, coherent, and sound philosophy of education. Many of these controversies result from the fact that the conflicting theories in question contain partial truths as opposed to whole truths. When reconstructed within the guiding principles of an adequate philosophy of education, the partial truths can form a sound and unified theory.

The conflict over theories of the teaching of reading illustrates the foregoing contention. Mr. Rudolph Flesch has fanned the flames of controversy on this problem in his popular book, *Why Johnny Can't Read, and What You Can Do About It.* (1) In most convincing terms he contended that American educators have foisted upon us "a Chinese Method" of teaching reading to our youngsters—the substitution of the "word method" for the "alphabetical and phonics" method of teaching reading.

Flesch asserted that this "new word method" has been in the saddle of American education since 1925 when the traditional "alphabetical and phonics" method was suddenly dropped. Since that time we have had more and more need for "remedial reading classes," not only in the public grade schools but up through college education. This remedial reading program, he contends, is unique to the United States, for in other countries where the alphabetical approach to reading is made they do not have the problem of large numbers of non-readers.

Flesch contended that the "word method" develops into a guessing game for the students. Since they cannot spell out or sound out the letters and syllables, students are forced to figure out from context or, more often, to wait for the teacher to tell them the word. They must remember the words individually, which he believes will not possibly work. Just because it was found that adults read by whole words and whole phrases in their eye movements and mental grasp of the words and phrases, it does not follow that youngsters in the initial process of learning to read should forego the necessary alphabetical and phonics approach. This is *non sequitur.*

We are reminded that the appearance of an alphabet about 1500 B.C. was regarded as a great step forward for civilization because it took man beyond the long and cumbersome method of memorizing literally thousands of hieroglyphics. Man could then use and learn an alphabet which in effect would be a shorthand approach to the learning of thousands of words of a given language.

Yet, in effect, this magnificent discovery and advance has been overthrown by those "modern experts" in reading who have returned to the word method of reading. Flesch argued that the solution of the "reading problem" is just this simple: we must return to an alphabetical and phonics approach to reading instead of the cruel and unworkable method of recent years.

We have all noted the consternation which has been evoked among professional educators by Flesch's charges and the counter charges which have been forthcoming from all camps. Some, of course, have rejected the whole point of Flesch's book as "just another irresponsible attack on American education." Undoubtedly, others have presented various defenses of the word method as opposed to the alphabetical approach. Then, too, it is notable that the attack has resulted in some serious soul-searching among those educators who feel that Flesch is not entirely wrong in his stand. Certainly, there are those who are in flat agreement with him. Defenders of the several theories of teaching-learning theory in general, and teaching of reading in particular, have rushed to the defense of their respective views.

Principles From The Organic Philosophy

How can the Organic Philosophy of Education assist in the successful resolution of this continuing controversy? (2) Or, what is the organic theory of the teaching of reading? If substantial aid can be given in terms of this problem, then we might be persuaded that particular "theories of education" really do need the guidance and wisdom of an over-all, systematic philosophy of education.

In response to this challenge we assert the immediate necessity of certain organic principles and conceptions which are indispensable to the resolution of this controversy: The Principle of Bipolarity, the co-ordination of "logical" and "psychological" processes, the Principle of Unity and Diversity, and their corollaries of whole-part, organic-atomistic, and conjunctive-disjunctive conceptions. (3) With organic principles and conceptions such as these, I think we can achieve a satisfactory resolution of the reading problem.

The principle of biopolarity is essential to an organic educational philosophy. It contends that reality and experience are characterized by opposites or co-ordinates, such as unity, and diversity, similarity and difference, and sameness and otherness. These bipolar co-ordinates are not 'dualistic' or absolutely inseparable; they are partly dependent, independent, and interdependent. For example, male and female components constitute a bipolar relationship. There is a relative separableness, a relative dependence, and a relative interdependence.

The bipolarity principle is applicable to the educational process in various contexts. When we realize that logical and psychological aspects of the educational process are bipolar in nature, it is easy to see that they are properly co-ordinated. It is an error to *subordinate* one to the other.

One of the perennial problems of philosophy has been that of the one and the many. Is reality a unity or a diversity? The organicist sees reality as a bipolarity of unity and diversity. The learner, for example, is in one sense a unity and in another a diversity; all in all he is an exemplification of the bipolarity of unity and diversity.

The bipolar principle is applicable

also to such relations as: whole and part, organic and atomistic, and the conjunctive and disjunctive. When we see that these are co-ordinate relations, there is no longer a problem of 'whole or part', 'organic or atomistic', or 'conjunctive or disjunctive.' They are legitimate distinctions of organic experience or realities.

At the outset, let us acknowledge the respective merits and validities inherent in both the letter and phonics method defended by Flesch and the opposing word method defended by other authorities in reading. Organically both of these methods are valid when they are viewed as partial processes within the totality of the learning process. By the same token, each theory is invalid, incomplete, and inaccurate when taken exclusively!

Application of Organic Principles

How do our organic principles apply? The teaching-learning process is not singularly "logical" or "psychological" as such. Logical and psychological continuities are bipolar, or a union of opposites, within the learning process. Education involves both analytical or structural intelligibilities *and* the co-ordination of experiential or functional intelligibilities. There is a "logic of subject matter" which must be taken into account; likewise, there is a co-ordinate "psychology of the learner" which must also be considered. The psychological aspect involves factors of experience, mental habits, attention, effort, interest, motivation, and readiness. They are indispensable parts of the total process; they represent two complementary poles; one without the other results in a very unfortunate monopolarity. In other words, it results in the error of onesidedness, and neglects the realization of bipolarity, or the unity of opposites.

The principles of the Organic Philosophy of Education require that the bipolar hemispheres of total learning must be sustained throughout schooling. As youngsters begin their formal educations they must be gradually introduced to the logic of subject matters as well as to the sequence or ordinary experiences, and their complementary relations. True enough, the proportion of systematic, conceptual learning, or the logic of objective analysis, is comparatively small in the early grades; yet, there is the beginning of an analytical continuity. Likewise, emphasis must be placed on the experimental sequences which are of utmost importance during these early years. Both hemispheres are present throughout schooling.

Learning to read provides the initial opportunity for the child to learn "analytically" and "logically" on the side of the alphabetical and phonics approach, and to learn "functionally" and "experientially" on the side of the word method approach or grasp of meaning approach. Both methods have valid elements when not taken exclusively; when combined, they complement one another and form sound theory.

Hence, the analysis of words by knowing the essential letters, syllables, and sounds is a requisite part of learning to read. Learning to see the parts as they build into whole words, phrases, and sentences, constitutes synthesis. The logical phase of learning sees the cognitive aspect of thinking and learning as involving systematic analysis and synthesis, even in learning the elements of words and language. This is the beginning of the development of the use of analytical *reason*. The actual habits and functions of reading are developed in

the co-ordinate hemisphere of "actual experiences" or ordinary life activities." The latter, of course, means reading whole words, whole phrases, within a meaningful context. One side is analytical and logical, and the other side is functional and experiential; both sides are necessary to the total learning process.

But what of the conflict of the methods? There is no necessary conflict when viewed organically. There are at least two different mind-sets and habits which are working co-operatively in the total process. When you teach children 26 letters which form the basis for 44 basic sounds in speech, and out of which all words in the English language can be formed and read, you are proceeding "analytically and "logically." This step by step alphabetical and phonic approach engenders habits and mind-sets of an analytical character. Each letter is a distinct "gestalt" or configuration; each letter is a whole as well as a part. These analytical skills and understandings are indispensable in learning to read.

The mental operations and mind-sets in the actual processes of experiential and functional reading are quite different, of course. Proper habits of reading require comparatively few eye movements per line, visual and mental grasp of whole words or whole groups of words, attention to whole words and meanings and not to individual letters. Meaningful experiences which accompany such actual reading provide much in the way of readiness, motivation, attention, and purpose. These factors which we might well term the "psychological" and "functional" side of the teaching of reading are requisite in the total process.

Using our organic Principle of Bipolarity, then, we see two different but interdependent poles of the teaching of reading. They are in one sense separable, and in another sense reciprocal. The alphabetical and phonics emphasis fosters the analytical and rational factors; the whole word emphasis fosters the experiential and functional. The former falls within the "logic of subject matter" and the latter is embraced in the realm of "ordinary experience." The two sets of skills and mental operations involved are different, but they are not incompatible. Viewed as diverse parts of a whole learning process, they are organically complementary. The trouble begins when one approach is taken to the exclusion of the other.

The controversy disappears when we see that there are partial validities in both theories. Learning the individual letters and sounds which make up whole words is admittedly "atomistic" in one sense, but in a perfectly necessary and legitimate sense. Critics are afraid that the letter method will engender habits of "atomistic" reading and the failure to grasp "wholes." But this is an unnecessary fear, when we realize that reading or seeing things "atomistically" or "organically," as parts or as wholes, shifts with our purposes. The child may shift into low gear when he spells or sounds out a new word, but he then shifts into high gear as he reads familiar words in terms of meaning. The two habits of thought are not mutually destructive. They can be co-operative.

Learning to read, then, is both atomistic and organic; it involves analysis of component parts, or letters, and the organic grasp of whole words in meaningful sequence in actual reading. Analogously, the study of grammar is analytical and logical; these habits of analysis are different from the habits of ordinary

conversation. Analytical grammar complements functional verbal expression; we accept the logic of grammar and the functional aspects of language as reciprocal. Why then do we not by the same token accept the logic of the alphabetical approach as complementary with and reciprocal with the experiential or functional approach to reading? We should from the organic point of view.

In other words we are concerned in the matter of learning letters and words with "the disjunctive and the conjunctive." Formidable as these terms may seem, they simply indicate that we may choose to see things in their "separability" or in their togetherness." Organically, we contend that we must see things both ways—in their disjunctive separability, and in their conjunctive togetherness. The human body, for example, can be considered in its unity and in its connectedness; on the other hand, we may choose to see the diversity or plurality of the parts which make up the body. Actually, there is bipolarity of unity and diversity, of whole and parts, of togetherness and separability. This is the essence of organic philosophical thinking.

The resolution of practical educational problems then requires an overall philosophy of education. In this case, the Organic Theory of Reading concludes that: (1) The alphabetical, phonics, approach to the teaching of reading is indispensable in the logical aspect; (2) the experiential, psychological, "wholeness' approach is also requisite in the functional sense; and, (3) that the two approaches must be coordinated so that the bipolarity of the "logical" and "psychological" aspects of the learning process are jointly realized.

REFERENCES

1. Flesch, Rudolph. *Why Johnny Can't Read, and What You Can Do About It.* New York: Harper and Brothers., 1955.
2. Wegener, Frank C. *The Organic Philosophy of Education.* William C. Brown Company, Dubuque, Iowa, 1957.
3. These principles cannot be discussed adequately in the context of this brief article. The interested reader is referred to the full exposition given in the book cited above in footnote number two.

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What Schools Are Doing In Promoting Physical Fitness

By GUY WAGNER*

"The health of a people is really the foundation upon which all their happiness and all their powers as a State depend."
—Disraeli

SUPPOSE ONE WERE to observe a hundred physical education programs selected at random throughout the country. There is little doubt but that there would be a wide difference in the nature of these programs in terms of such factors as time allotments, range of activities, emphasis on athletics, attention to health habits, adequacy of facilities, and quality of instruction. Probably the observer would culminate his visits with the feeling, "If only *all* schools could have the excellent programs which are found in the best!"

Threading throughout the top-level programs, which are represented by the reviews presented herein, the following common characteristics stand out as of particular significance:

1. All good physical education programs emphasize its importance in the development of emotional, social and mental growth as well as physical fitness itself.
2. The *way* in which physical education teachers work with their pupils is extremely important in terms of pupils' mental health.
3. The adequate physical education program will do much in bringing about a healthy school morale.
4. The physical fitness of *all* pupils should be a corollary of a high-level sports program. For this reason intramural activities are in the ascendancy. In addition, more and more attention is being given to individual body building activities, such as apparatus work.
5. Cleanliness, good sportsmanship, and effective human relations are integral parts of a sound physical education program.
6. The physical fitness of teachers as well as pupils should be the concern of the school, both in terms of teacher efficiency and teacher example.[1]
7. Physical education programs should develop attitudes and physical skills which will have a good carry-over into adult life.

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1. The 1957 Yearbook of the American Association for Health, Physical Education and Recreation, entitled *Fit to Teach,* is primarily concerned with the health of the teacher and outlines personal, administrative, organizational, and community responsibilities in this connection.

8. The good physical education program will help individuals make adjustments for right living now and in the future. It will make healthful living a habit.
9. A good physical education program is not haphazard; instead it has a systematic progression throughout the grades in the difficulty and range of activities.
10. A well-balanced physical educational program gives reasonable attention to co-educational activities at the secondary level as well as at the elementary level.
11. The physical education program for girls is not a copy of the physical education program for boys, although it may be overlapping in many respects. It differs chiefly in that it respects the femininity of the girls.
12. The physically handicapped are given particular thought and consideration in the good physical education program both in terms of appropriate activities and rest; also in opportunities for achievements which command the respect of the handicap child's peers.

Grosse Pointe Public School System, *Physical Education for Early Elementary School Children*. Grosse Pointe, Michigan, 1955, mimeographed, 106 pp.

The teacher writers of this helpful publication point out that physical education is not an isolated subject. Instead it is related to all phases of the curriculum and can contribute importantly to the total educational program. "However, if children are to receive the greatest benefits from physical education, each phase of the program must be well planned and should allow the utmost opportunity for progression in experiences." It is pointed out that advancement of some phases of physical education can be seriously retarded when there is undue repetition or when the activities are too difficult for a particular age level.

There are thirty-five sections in this curriculum guide, including such interesting titles as: (1) classification of physical education activities, (2) teaching the basic skills of locomotion, (3) story plays, (4) mimetics, (5) simplified games, (6) progression in early elementary rhythms, (7) recommended singing games, (8) self-testing activities and stunts, and (9) progression in tumbling.

Missouri State Department of Education, *A Guide for Physical Education in the Elementary School*. Jefferson City, Missouri, 1956, 280 pp.

This guide presents a well-balanced program of activities for grades one through six. As is typical of carefully planned physical education guides there is a progression program with a wide range of activities based on the age characteristics and needs of children.

The writers point out that physical education, although based on physical activities, is designed to develop our children mentally, emotionally, and socially as well as in the physical aspects of their growth. "The skills, interests and attitudes acquired in activity should help the participant to possess a healthy and efficient body, an alert and creative mind, emotions that are well under control, and social behavior that is sound for living and serving well in a democratic society."

This very thorough publication, produced jointly by classroom teachers and specialists in health and physical education, presents a wealth of concrete help in such areas as: (1) organization and administration of the program, (2) teaching suggestions, and (3) analysis of skills in rhythmic activities, game techniques, and group activities.

In addition, one entire section is devoted to a discussion of age characteristics of the elementary school child. Specific activities are recommended for use in each of the grades, one through six. There is also an entire section listing teaching aids such as homemade equipment and games for special occasions. The publication concludes by suggesting ways for the evaluation of the local physical fitness program.

St. Louis Public Schools, *A Course of Study in Elementary School Physical Education*. St. Louis, Missouri, 1955-56.

This course of study is in two parts—Volume II, No. 1 for the kindergarten-primary grades (95 pages) and Volume II, No. 2 for the intermediate grades (148 pages). These were published in 1955 and 1956 respectively.

It is pointed out that physical education has in recent years acquired a broader meaning and a greater significance than a program designed for physical fitness alone. The aim of the St. Louis program "is to develop active minds and bodies by promoting such physical activities, skills, attitudes, and knowledges as will enable the individual to make adjustments for right living now and in the future."

This course of study is a graded program which should be adapted to the school situation, the time of the year, and the individual needs of the child. There is little duplication of activities in the different grades because it is felt that the progress of the child will be more rapid and his skills and interest more varied if there is a definite content for each grade. Any activities from previous grades, if still interesting to the child, may be used as supplementary. A variety of activities have been included in each grade, and the teacher should chose from each group those more suitable for the class.

A successful physical education program depends on careful selection of activities, sufficient development of skill, and good teaching. This course provides for the first two of these requisites, the third is in the hands of the teacher and the principal who supervise the program in each school.

Seattle Public Schools, *Games Activities for the Intermediate Grades*. Seattle, Washington, 1955, 214 pp.

This manual is the outgrowth of a combined effort of many persons. The material was gathered, tried, and then presented to a Steering Committee, which further evaluated and "tailored the material to fit the format of the manual."

This publication emphasizes the point of view of most forward-looking physical education programs today. It points out that schools must first understand the physical education objectives are to be achieved in light of the needs and interests of the age groups being taught. Furthermore, the major objectives of physical education "are basically the same as for other courses of the curriculum." The differences lie only in the methods, materials, types of experience, and space needed to achieve their aims.

When a physical education program is properly planned, organized, and presented it promotes positive growth in the physical, mental, emotional, and social facets of each child's individual make-up. In order to meet these growth needs the program must be one of wide range and balance. The teacher should constantly be on guard lest his own interests result in a one-sided program, for he is the only medium that converts the material at hand to the needs and interest of the child.

The first twenty-six pages are given over to an excellent presentation of how to plan, organize and carry out a physical educational program. This is followed by nearly a hundred pages devoted to seasonal sports. Other sections deal with: (1) circle-tag and goal games, (2) relays, (3) rainy day and limited area games, (4) self-testing activities and stunts, and (5) intramural athletics. A unique and valuable feature is the carefully developed index of several hundred topics.

The Seattle schools have another valuable physical education publication entitled *Rhythmic Activities for the Primary Grades*, 1954, 65 pages.

Louisville Public Schools, *Physical Education Activities for Junior High School Boys and Girls*. Louisville 8, Kentucky, 1956, 153 pp.

This excellent guide is a revision of an earlier publication. It was prepared for the purpose of helping physical education teachers in organizing their les-

son plans so as to get the maximum use of the facilities available and still maintain well-balanced programs. All of the ideas, suggestions, and materials included are the result of a questionnaire sent to the junior high school physical education teachers of the city. It is a good example of the "grass roots" approach to curriculum construction, showing as it does the co-operative activity of many teachers working toward a common goal.

The writers define physical education as " that part of education which has to do with the whole body of the individual, its movement, its care, and its use." Some of the major aims of the Louisville physical education program are: (1) to satisfy the physical, social and emotional needs of the junior high school students, (2) to create a situation in which healthful living will become a habit, (3) to develop citizens who practice the principles of fair play, honesty, and sportsmanship, and (4) to create a lasting interest in physical education activities so that they will be carried over into adult life.

The publication is divided into such sections as girls' activities, boys' activities, activities for both girls and boys, group games, intramural programs, and instructional materials.

Long Beach Public Schools, *Guide to the Teaching of Physical Education for Junior High School Girls*. Long Beach, California, 1956, mimeographed, 92 pp.

As with all Long Beach curriculum materials, this publication is only available in selected depositories throughout the country.

This course of study presents a rich and varied program; it is extremely well organized; it presents only those activities which are particularly useful in meeting the needs of younger adolescent girls; it is a co-operative project and each teacher is expected to adapt the suggestions to her own individual group and situation.

As with other similar publications, it is pointed out that an effective program of physical education "has the same broad, over-all purpose as any adequate, far-reaching educational program in a democratic society; namely, the guidance and development of all youth toward physical, mental, social, and emotional competence."

The ten major sections of this publication are: (1) guidelines, (2) organization and administration, (3) orientation unit, (4) unit on apparatus activities, (5) unit on stunts and tumbling, (6) unit on rhythms, (7) unit on team sports, (8) unit on individual sports, (9) unit on posture and body mechanics, and (10) unit on health and safety.

Cleveland Public Schools, *Teaching Guide for Boys Physical Education*. Cleveland, Ohio, 1955, 118 pp.

This teacher's guide for boys' physical education in the Cleveland Junior and Senior High Schools presents a broad and adaptable program, providing the minimum essentials for each of the various activities in the program. "It is expected that each pupil participating in these activities will satisfactorily master minimum essentials before he is allowed to progress into more advanced forms of the program." There are opportunities for organized leaders' groups and also a wide offering of activities on the intramural level.

The basic aim of the Cleveland physical program is, "through the medium of wholesome and interesting physical activities to afford an opportunity for the individual or group to act in situations that are physically wholesome, mentally stimulating and socially sound; and to establish maximum facilities and opportunities for wholesome self-expression, under qualified leadership to the end that physical, mental, and social growth and development best lead to complete living."

This teacher's guide is divided into sections as follows: (1) general educational objectives, (2) a suggested cyclic seasonal program, (3) apparatus and tumbling, (4) team games, (5) individual sports, (6) marching, (7) intramurals, (8) intensified physical education, (9) tests and measurements.

Pennsylvania State Department of Public Instruction, *Physical Education —Secondary School Program,* Bulletin 311. Harrisburg, Pennsylvania, 1956, 149 pp.

The writers of this very thorough and well-organized curriculum guide emphasize that a comprehensive program to meet the health and fitness needs of children should among other things, provide for: (1) adequate time allotment for health instruction and physical education, athletic and recreational activities for all children and youth, and participation in solving individual and community health problems; (2) planning for inspection of the school plant, and a planned program to insure and to utilize a safe, sanitary, and healthful school environment, including transportation; (3) thorough school medical examination including necessary immunization and laboratory procedures; (4) special testing programs and treatment as needed for abnormalities such as those of vision, hearing, and speech; (5) cumulative health records including nutritional and mental status; (6) a school lunch program developed as part of the total educational program; (7) dental care; (8) mental hygiene; (9) care for exceptional children with crippling diseases, especially rheumatic fever; (10) treatment as needed for other adverse health conditions as tuberculosis and venereal disease; (11) health service for school personnel; and (12) an organized program of parent education and participation.

In the introductory part, it is pointed out that the scope of physical education is such that it contributes to good citizenship, to health education, to recreation, to leadership education, to safety education, and to guidance.

Chapter II gives detailed instructions as to the planning and administering of the physical education program. Here such matters as program planning and the selection and organization of activities are developed.

Chapters III and IV present the physical education program in some detail. Another chapter is devoted entirely to the recreational program and there is an extensive listing of references and instructional materials. Many educators will be interested in the cardinal athletic principles and standards in athletics for boys, and standards for girls' sports as found in Appendix D.

Virginia State Department of Education, *Physical Education—Grades VII-XII.* Richmond, 1955, 435 pp.

The State Department points out that this guide is to assist local schools in planning and developing their physical education offerings. It is understood that teachers and school administrators will want to use the suggestions in relation to their local needs. For to be most effective, a program must originate in the local school and community.

The writers point out that "It has long been recognized that a well-planned physical education offering, embodying rich and varied experiences, provides a very helpful means of guiding pupils through successive stages of growth and development so that they gain, in addition to greater neuromuscular skill and organic strength, more of the social, mental and emotional characteristics and qualities essential to a well-rounded personality." An important emphasis is that although pupils of high school age may have many common characteristics it is also true that varying degrees of individual differences exist. "The good school recognizes this and plans its physical education program accordingly." Opportunities are provided for every pupil to achieve success to the extent of his capabilities.

Highlights of this very helpful publication include a "Chart of Traits Which Characterize High School Youths" in terms of their (1) characteristics, (2) interests, (3) needs, and (4) activities. Part II is an extensive treatment of the physical educational offerings. Part III is a descriptive analysis of the fundamental skills. Part IV presents many physical education activities such as team sports, rhythmic activities, social and recreational activities, and conditioning exercises. Part V gives

a most complete listing of such supplementary materials as equipment and supplies, recommendations for playgrounds, safety suggestions, intramural activities, interschool activities, and suggestions for physical education demonstrations. A unique feature is the detailed index to skills and activities.

Several curriculum guides came to the writer's attention after the manuscript for this column was written. These are: (1) San Diego County Schools, *Physical Education*, San Diego, California, 1957, (2) Oakland Public Schools, *Guide for Instruction in Team Games, Individual, Dual and Recreational Games*, Oakland, California, 1957, (3) Los Angeles City Schools, *Physical Education Teaching Guide*, Los Angeles, California, 1957, and (4) Fresno City Unified School District, *Course of Study in Boys' Physical Education*, Fresno, California, 1957.

BOOK REVIEWS

HOME ECONOMICS: CAREERS AND HOMEMAKING. By Olive A. Hall. N. Y. John Wiley. 1958. $4.25.

The point of view held by the author of this comprehensive and carefully organized text is that training in home economics serves the dual purpose of preparing for personal and home life as well as a career. Brief chapters on home economics in higher education and on higher education for woman lead to a very interesting chapter on scope and development of home economics. These chapters are followed by chapters dealing with problems of vocational choice, the profession of homemaking, and the outlook for teachers in the various areas of home economics. The entire approach is based on sound and tested home economics theory and principles. An excellent text for undergraduate students in home economics in both liberal arts colleges and in teacher education centers.—W. P. S.

THE GREAT DAYS. By John Dos Passos. N. Y. Sagamore Press. 1958. $4.50.

John Dos Passos is one of our foremost novelists. It was in the 1920's that he first began to attract attention. *Three Soldiers, Manhattan Transfer,* and *U. S. A.* are outstanding novels and they have done much to establish the position of Dos Passos as a creative novelist. *The Great Days* is a simple and moving story of mature love and loneliness. The story is that of an ex-celebrity who, during an interlude of drinking and love in Havana, tries to rekindle both his youth and his achievements as he recounts to himself the "great days" of the past.—W. P. S.

AN INTRODUCTION TO EDUCATION IN MODERN AMERICA. By Gordon C. Lee. N. Y. Holt. 1957. $5.25.

This is a revision of a text that first appeared in 1953. The book offers a survey of American education and is designed especially for students who are contemplating a career in education. The nature of contemporary American society is first presented as a background against which the purposes of American education are discussed. The student is next asked to study the organization and administration of education. A very direct and helpful chapter considers the preparation and selection of teachers for our schools. Conflicting purposes and pressing problems are pointed out throughout the text and they are presented in such a manner as to encourage discussion, thought, and critical appraisals.—W. P. S.

Franklin Watts

FRANKLIN WATTS, the founder-president of Franklin Watts, Inc., decided when he started a publishing business of his own in 1942 that he would confine his publishing to books that he could understand himself.

The best known publications of his firm have been the famous FIRST BOOKS. Although the title, "First Book," seems obvious now, until Franklin Watts started this Series it had only been used in connection with adult books and had never been used as a series title. "First Book" was first used when a relatively simple manuscript on flying was accepted for publication. It had no title. So, after consulting catalogues and finding that "First" had not been used as a series title, the FIRST BOOKS began and have now extended through ninety titles now published or announced for 1958 publication.

The concept basic to FIRST BOOKS, as evolved by Franklin Watts, his wife-associate, Helen Hoke Watts and the Watts editors, is to present non-fiction material in as simple a manner as the subject permits. Never were these books considered to be first or second-grade readers. If technical language is required, it is used. These books are not "written down." Rather, they are for children and adults who are looking for a good solid introduction to a subject,—From BASEBALL to SPACE TRAVEL to THE AMERICAN REVOLUTION.

With this concept in mind, the range of subjects is almost unlimited. Any and all subjects of interest to children through the elementary grades can be included in this Series. The all-time best seller in the Series has been THE FIRST BOOK OF STONES, and currently THE FIRST BOOK OF AMERICAN HISTORY, by Henry Steele Commager, is selling equally as well.

This spring the list includes such subjects as varied as THE FIRST BOOK OF ENGLAND, THE FIRST BOOK OF FAIRY TALES, and THE FIRST BOOK OF WORLD WAR II. Mr. Watts says that he will not attempt to predict which of these three will find the largest audience as all appear to be subjects in great demand.

Another group of books, THE TERRIFIC TRIPLE TITLES came into being in 1949. Phyllis Fenner had com-

piled an anthology of horse stories; but there was no title. One day Helen Hoke Watts realized that she had been humming "horses, horses, horses, crazy over horses, horses, horses." Her subconscious had given her the title. She said, "Why not call it, HORSES, HORSES, HORSES?" Everyone agreed that the title certainly was distinctive and appropriate. Since then sixteen titles have been brought out in this Series from AMERICA, AMERICA, AMERICA to YOUTH, YOUTH, YOUTH. Of course, this tripling of a title cannot be used on all subject; so only one or two a year are published.

"Series" publication has its advantages, according to Mr. Watts, but it also has its limitations. The Watts list has always had a number of titles that are completely removed from any series. One recent title, ABNER'S CABIN, by Alf Evers and illustrated by Leonard Weisgard, is a delightful story of what happened over generations to one small cabin. Another is Peggy Bacon's THE GOOD AMERICAN WITCH, a modern version of the classical fairy tale, illustrated most appropriately by this fine author-artist. Jeanne Bendick, who had always written and illustrated nonfiction, had a lot of fun doing THE GOOD KNIGHT GHOST, the hilarious adventures of a ghostly knight and dragon in a present-day museum.

Franklin Watts has always felt that publishing books for children has been a most rewarding aspect of his business career as true merit is always rewarded. The people who work with books and children always want the best and see to it that the best books receive the rewards they deserve in having a wide, enthusiastic, and appreciative audience.

WANTED

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We need many back numbers of EDUCATION to supply the needs of libraries and others. If you have any back numbers you no longer want, let us know what issues they are and we will make you a cash offer for them. We particularly want any 1945, 1946, 1947 and 1954 numbers.

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Letter *to the* Editor

Dear Editor:

I am writing as both an educator and mother of three young children. Our three children (boy 7 yrs., girl 9 yrs., and boy 11 yrs.), although related through blood, genes, and raised under similar environmental conditions and influences, are as different as "night and day"—in temperament, personality, interests, and ability. Their mental capacity, according to Wechslers' individual tests, are high. Now, if three children living within the same environmental influence plus having a near and high aptitude for learning are so completely individual and different in their entire "make-up"—how much more so will children in the classroom differ from each other?"

How are we teachers providing for each individual child in reading? Grouping children within the classroom is the present system of providing for individual differences today. Some teachers have taken a step further and have made their groups flexible.

Grouping is a start in the right direction but we need to go further than grouping—to get to the individual child. In the January 1958 issue of "Education," May Lazar of the City of New York, has written an article explaining in detail the program of "Individualized Reading." This is an excellent article for teachers in all fields and branches of education to read, study and put into practice. The elementary schools that have started the "Individualized Reading Program" have only the most favorable reports about it.

To ensure a successful "Individualized Reading" program within the school, it must be continued and carried over into the home environment of each child. This necessitates the informing and guiding the parents of each child. Informing and guiding parents doesn't mean—having a sociable and friendly little chat with parents concerning their child—it means *educating the thinking and planning habits of parents concerning their individual childs' needs.* Included in the planning habits must be positive ways and means to help the home-libraries to grow and develop with each individual child according to his interests and independent reading level.

There are many wonderful, well-written and readable books of all kinds—and written on almost any subject or interest a child may acquire or have these days. Our problem is how can parents be taught the value and the selecting of books that will fill the need of their individual child—when at home—to ensure a well-rounded program in "Individualized Reading?"

Martyne C. Kolm
12 East Wissahickon Avenue
Flourtown, Penna.

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1958

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Motels and tourist houses are also available in the vicinity.

TRANSPORTATION:

The Betts Reading Clinic is located on Montgomery Avenue (Route 23A)—one block from the Haverford Station on the Main Line of the Pennsylvania Railroad. The Paoli local—a suburban train—may be taken from either the Suburban Station or the 30th Street Station in Philadelphia, a 17-minute ride.

Taxi service is available from Southwest International Airport, Philadelphia.

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